VALVES

PRODUCT CATALOGUE

Global Water Group (GWG)

Company Overview

Global Water Group (GWG) is a leading Australian supplier and solutions provider in the fluid movement and water services industry, with over 40 years of experience supporting projects across mining, civil, agriculture, aquaculture, and associated sectors. We pride ourselves on delivering high quality, custom products and services that meet the unique needs of our customers and the demanding conditions of the Australian market.

At GWG, quality is at the heart of everything we do, from design and raw material sourcing through to manufacturing, fabrication, distribution, and delivery. Our extensive product range includes polyethylene (PE) pipe spigot fittings, electrofusion fittings, valves, flanges, pipe systems, PE welding equipment, and specialised fabricated items, all designed to meet strict Australian and international standards.

Our team brings deep industry expertise and technical know-how to every project. We work closely with clients to provide tailored solutions, technical assistance, seamless supply logistics, installation support, and ongoing after sales service, ensuring the right solution for the right application every time.

GWG operates from strategically located, fully stocked warehouses along the Australian eastern seaboard, enabling us to support customers nationwide with fast turnaround times and reliable delivery. Our head office is located at our modern and efficient Brisbane facility, while our Townsville site includes a state of the art fabrication workshop staffed by certified welders capable of producing custom manifolds and complex polyethylene assemblies.

Through our commitment to quality, continuous improvement, and exceptional service, GWG has built a strong reputation as a trusted partner in water infrastructure and fluid movement solutions delivering value, reliability, and performance across every engagement.

"Together, we move water"



About This Catalogue

This catalogue has been produced by Global Water Group (GWG) to provide an overview of our valve range. If an item you require is not listed, please contact our sales team. GWG can source and supply a wide range of associated products and also offers custom manufacturing solutions.

Measurements

All dimensions in this catalogue are shown in millimetres (mm) and weights in kilograms (kg) unless otherwise stated. Measurements and specifications are provided as a guide only and are subject to change without notice. For confirmation or further information, please contact our sales team.

Contents

BUTTERFLY VALVES

CARTRIDGE SEAT		
BVW	Wafer butterfly valve — Ductile Iron FBE Coated, S/S Disc, NBR cartridge seat, DN50–DN600	5
BVWS	Wafer butterfly valve — Stainless Steel, S/S Disc, PTFE Coated NBR cartridge seat, DN50–DN600	9
BVL	Lugged butterfly valve — Ductile Iron FBE Coated, S/S Disc, NBR cartridge seat, DN50–DN600	13
BVL (DINP)	Lugged butterfly valve — Ductile Iron FBE Coated, DINP Disc,NBR cartridge seat, DN50–DN600	
VULCANISED SEAT		
BVLV	Lugged butterfly valve — Ductile Iron FBE Coated, S/S Disc, NBR Vulcanised Seat, DN50–DN600	17
BVF	Flanged butterfly valve - Ductile Iron FBE Coated, S/S Disc, NBR Vulcanised Seat, DN50–DN600 Table E	24

VALVE ACCESSORIES

BVES	Butterfly valve extensions — Ductile Iron FBE Coated, DN50–DN600, 1 m / 1.5 m / 2 m	73
BVG	Butterfly valve gear boxes — Standard or Lockable, DN50–DN1200	74

CHECK VALVES

CVWD	Dual disc wafer check valve — Ductile Iron FBE Coated, DN50–DN600	29
CVWDS	Dual disc wafer check valve — 316 stainless steel, DN50 - DN600	31
CVWS	Single disc wafer check valve — Ductile Iron FBE Coated, DN50 - DN600	33
CVWSPS	Single disc wafer check valve — 316 stainless steel, DN50–DN600	35
CVFRS	Flanged Swing Flex Check Valve - Table D and Table E Ductile Iron FBE Coated	37
CVFSA150	Flanged Swing Check Valve — ANSI 150 Stainless Steel	39
CVFWA150	Flanged Swing Check Valve — ANSI 150 WCB Cast Carbon Steel	41
CVFWA300	Flanged Swing Check Valve — ANSI 300 WCB Cast Carbon Steel	43

BALL VALVES

BVS2P	Two piece ball valve, stainless steel DN10–DN100	46
BVS3P	Three piece ball valve, stainless steel DN10–DN100	47
BV3WLS	Three way L port ball valve — stainless steel, DN10–DN100	48
BV3WTS	Three way T port ball valve — stainless steel, DN10–DN100	50

KNIFE GATE VALVES

KGVSM	Knife gate valve — Uni Directional Metal Seat Stainless Steel, DN10–DN100	53
KGVRSN	Knife gate valve — Uni Directional Resilient Seat Stainless Steel, DN10–DN100	54
KGV-B-SS	Knife gate valve — Bidirectional, stainless steel, DN50–DN600	55

ACTUATORS

APDA	Pneumatic double acting actuator	58
APSA	Pneumatic single acting air valve	62
ADASQ	DRIVE ADAPTOR SQUARE TO SQUARE	77
ADASR	DRIVE ADAPTOR STAR TO ROUND	78

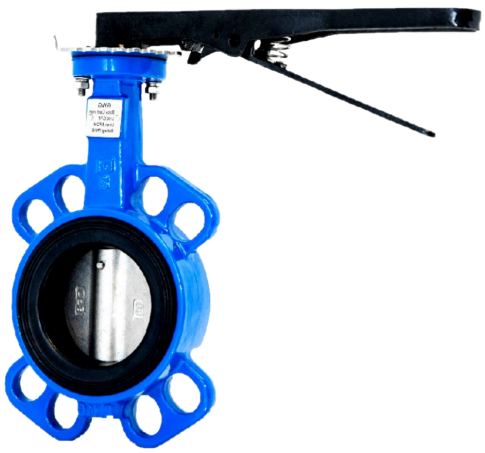
Butterfly Valves

BUTTERFLY VALVES · PHENOLIC HARD BACK CARTRIDGE SEAT

BVW Wafer Butterfly Valve

16 bar rated wafer-pattern ductile iron butterfly valve with a replaceable NBR cartridge seat on a phenolic hard back, for high-repetition and actuated service. DN50–DN600.

API 609 | API 598 | AS 2129 | ISO 5211



FEATURES

- 16 bar pressure rated
- Ductile iron body with fusion bonded epoxy coating
- 316 stainless steel disc
- NBR resilient cartridge seat with phenolic hard back
- Replaceable seat
- Compatible with PN16 / Table D, Table E and ANSI 150 flanges
- Bi-directional with bubble tight sealing
- Blow-out proof stem
- Suitable for high repetition and actuated applications
- Flange seal design eliminating the need for flange gaskets
- ISO top mounting flange for ease of actuation
- Gearbox fitted as standard on all sizes 350 mm and above
- Design and manufacture according to API 609
- Inspection and test according to API 598
- Fasteners: 316 stainless steel

Not suitable for end of line use unless fitted with a flange on the open side — required to support the cartridge seat.

TECHNICAL SPECIFICATION

Construction	**Wafer concentric seal on body butterfly valve**
Size	**50 mm – 600 mm**
Pressure rating	**PN16 (16 bar)**
Face to face	**According to API 609**
Flange drilling	**AS 4087 PN16 (Table D) AS 2129 Table E ANSI B16.5 #150**
Coatings	**Fusion bonded epoxy**
Mounting pad	**ISO 5211**
Temperature range	**−10 °C to 90 °C (nitrile)**

PRESSURE TESTING

BODY / SHELL	SEAT
2.4 MPa	**1.76** MPa

Inspection and test according to API 598.

CONTROLS & OPTIONS

Lever operation	**300 mm and below**
Gear operation	**50 mm – 600 mm**
Electric actuators	**12 V, 24 V, 240 V, 415 V**
Pneumatic actuators	**Single and double acting**
Valve extensions	**0.5 m to 2 m lengths**

MODEL CODES & OPERATING DATA

Model	DN (mm)	Pressure range	Temperature range	ISO 5211 top flange	Square H×H	Round Øc	Torque (Nm)
BVWN*050	50	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	11.7
BVWN*065	65	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	18.2
BVWN*080	80	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	28.6
BVWN*100	100	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	11 × 11	—	44.2
BVWN*125	125	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	14 × 14	—	66.3
BVWN*150	150	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	14 × 14	—	101.4
BVWN*200	200	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	17 × 17	—	149.5
BVWN*250	250	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	22 × 22	—	227.5
BVWN*300	300	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	22 × 22	—	377
BVWNG350	350	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	—	31.6	859.3
BVWNG400	400	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	33.15	1458.6
BVWNG450	450	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	38	1721.2
BVWNG500	500	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	41.15	2745.6
BVWNG600	600	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F16	—	50.65	3088.8

* refers to operation type L (lever operated) or G (gear operated).

COMPONENTS

No.	Item	Material
1	Body	Ductile iron
2	Disc	SS 316
3	Stem	SS 420
4	Stem bushing	PTFE
5	Seat	NBR
6	O-ring	NBR
7	Pin	SS 316

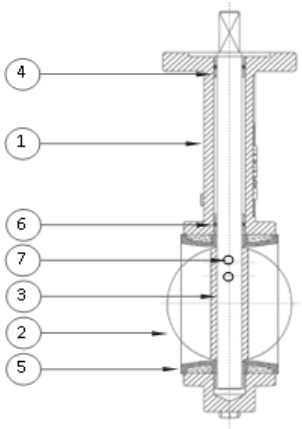


Fig. 1 — Component identification, numbered per table.

ISO 5211 TOP FLANGE

Flange	ØN (mm)	ØC1 (mm)	n1-Ød1
F05	65	50	4 – Ø8
F07	90	70	4 – Ø10
F10	125	102	4 – Ø12
F14	175	140	4 – Ø18
F16	210	165	4 – Ø22
F25	300	254	8 – Ø18
F30	350	298	8 – Ø22

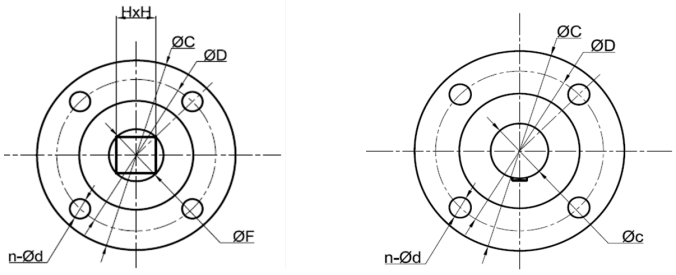


Fig. 2 — Top flange interface: square drive (left) and round drive (right).

DIMENSIONAL SPECIFICATIONS

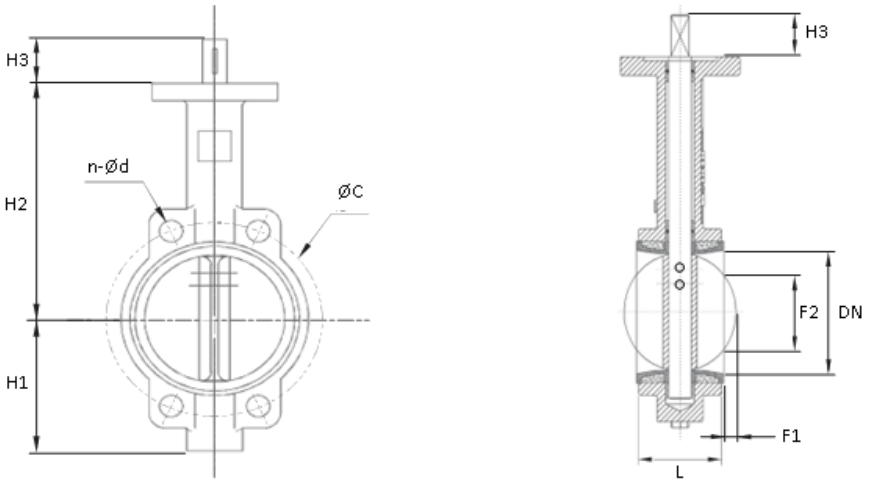


Fig. 3 — Front view (ØC, n-Ød) and sectional side view (L, F1, F2, H1–H3, DN).

BUTTERFLY VALVE — WAFER, LEVER OPERATED

								Table D		Table E		ANSI 150	
Code	DN	L	H1	H2	H3	F1	F2	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød
BVWNL050	50	43	57	143	29	3.2	25.1	114	4 – Ø18	114	4 – Ø18	120.6	4 – Ø19
BVWNL065	65	46	68	155	29	7.6	41.4	127	4 – Ø18	127	4 – Ø18	139.7	4 – Ø19
BVWNL080	80	46	82	160	29	14.9	61.8	146	4 – Ø18	146	4 – Ø18	152.4	4 – Ø19
BVWNL100	100	52	100	181	29	25.1	89.1	178	8 – Ø18	178	8 – Ø18	190.5	8 – Ø19
BVWNL125	125	56	112	194	29	32.6	108.7	210	8 – Ø18	210	8 – Ø18	215.9	8 – Ø22.4
BVWNL150	150	56	126	202	29	48.9	144.6	235	8 – Ø18	235	8 – Ø22	241.3	8 – Ø22.4
BVWNL200	200	60	162	240	35	70	192.5	292	8 – Ø18	292	8 – Ø22	298.4	8 – Ø22.4
BVWNL250	250	68	193	272	35	90.3	240.5	356	8 – Ø22	356	12 – Ø22	361.9	12 – Ø25.4
BVWNL300	300	78	236.5	318	35	111	290.8	404	12 – Ø22	406	12 – Ø26	431.8	12 – Ø25.4

BUTTERFLY VALVE — WAFER, GEAR OPERATED

BUTTERFLY VALVE — WAFER, GEAR OPERATED

								Table D		Table E		ANSI 150	
Code	DN	L	H1	H2	H3	F1	F2	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød
BVWNG050	50	43	57	143	29	3.2	25.1	114	4 – Ø18	114	4 – Ø18	120.6	4 – Ø19
BVWNG065	65	46	68	145	29	7.6	41.4	127	4 – Ø18	127	4 – Ø18	139.7	4 – Ø19
BVWNG080	80	46	82	160	29	14.9	61.8	146	4 – Ø18	146	4 – Ø18	152.4	4 – Ø19
BVWNG100	100	52	100	181	29	25.1	89.1	178	8 – Ø18	178	8 – Ø18	190.5	8 – Ø19
BVWNG125	125	56	112	194	29	32.6	108.7	210	8 – Ø18	210	8 – Ø18	215.9	8 – Ø22.4
BVWNG150	150	56	126	202	29	48.9	144.6	235	8 – Ø18	235	8 – Ø22	241.3	8 – Ø22.4
BVWNG200	200	60	162	240	35	70	192.5	292	8 – Ø18	292	8 – Ø22	298.4	8 – Ø22.4
BVWNG250	250	68	193	272	35	90.3	240.5	356	8 – Ø22	356	12 – Ø22	361.9	12 – Ø25.4
BVWNG300	300	78	236.5	318	35	111	290.8	406	12 – Ø22	406	12 – Ø26	431.8	12 – Ø25.4
BVWNG350	350	78	368	267	45	126.9	323.7	470	12 – Ø26	470	12 – Ø26	476.2	12 – Ø28.4
BVWNG400	400	102	400	298.6	51.2	149.7	378.8	521	12 – Ø26	521	12 – Ø26	539.7	16 – Ø28.4
BVWNG450	450	114	422	318	51.2	166	427.3	584	12 – Ø26	584	16 – Ø26	577.8	16 – Ø31.8
BVWNG500	500	127	480	355	64.2	178.4	472.8	641	16 – Ø26	641	16 – Ø26	635	20 – Ø31.8
BVWNG600	600	154	562	444	70.2	218.4	571.9	756	16 – Ø30	756	16 – Ø33	749.3	20 – Ø35.1

All dimensions in millimetres unless stated. Flange patterns: Table D, Table E and ANSI 150.

ACCESSORIES

Gear operators and extension spindles for this valve are covered by separate data sheets: **BVG** Butterfly Valve Gear Boxes (standard or lockable, DN50–DN1200) and **BVES** Butterfly Valve Extensions (ductile iron extension spindles, DN50–DN600, 1 m / 1.5 m / 2 m).

STANDARDS & APPROVALS

- Design and manufacture according to API 609
- Inspection and testing according to API 598
- Flange drilling according to AS 2129 / AS 4087 and ANSI B16.5
- Actuator mounting according to ISO 5211

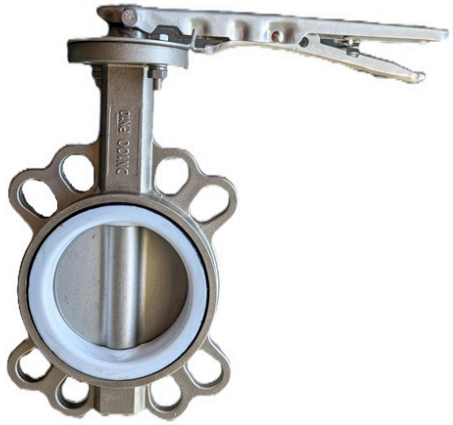
Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

BUTTERFLY VALVES · STAINLESS STEEL · CARTRIDGE SEAT

BVWS Stainless Steel Wafer Butterfly Valve

PN10 rated wafer-pattern butterfly valve with a CF8M stainless steel body and disc, SS431 stem and a replaceable PTFE coated NBR cartridge seat. DN50–DN300.

CF8M BODY & DISC | PN10 / 10 BAR | AS 2129 | ISO 5211



FEATURES

- 10 bar pressure rated
- CF8M stainless steel body and disc
- SS431 stem with PTFE bushing
- PTFE coated NBR resilient cartridge seat
- Replaceable seat
- PN10 rated — drilled to Table D, Table E and ANSI 150 flange patterns
- Bi-directional with bubble tight sealing
- Blow-out proof stem
- Suitable for high repetition and actuated applications
- Flange seal design eliminating the need for flange gaskets
- ISO top mounting flange for ease of actuation
- Gear operation available on all sizes — supplied with the standard gearbox
- Design and manufacture according to API 609
- Inspection and test according to API 598
- Fasteners: 316 stainless steel

Not suitable for end of line use unless fitted with a flange on the open side — required to support the cartridge seat.

TECHNICAL SPECIFICATION

Construction	**Wafer concentric seal on body butterfly valve**
Size	**50 mm – 300 mm**
Pressure rating	**PN10 (10 bar)**
Face to face	**According to API 609**
Flange drilling	**AS 2129 Table D AS 2129 Table E ANSI B16.5 #150**
Body finish	**Uncoated CF8M stainless steel**
Mounting pad	**ISO 5211**
Temperature range	**–10 °C to 90 °C (PTFE coated NBR)**

PRESSURE TESTING

BODY / SHELL	SEAT
1.5 MPa	**1.1** MPa

Inspection and test according to API 598.

CONTROLS & OPTIONS

Lever operation	**50 mm – 300 mm**
Gear operation	**50 mm – 300 mm (standard gearbox)**
Electric actuators	**12 V, 24 V, 240 V, 415 V**
Pneumatic actuators	**Single and double acting**

MODEL CODES & OPERATING DATA

Model	DN (mm)	Pressure range	Temperature range	ISO 5211 top flange	Square H×H	Round Øc	Torque (Nm)
BVWS*050	50	Vacuum to 10 bar	−10 °C to 90 °C (PTFE/NBR)	F05	9 × 9	—	11.7
BVWS*065	65	Vacuum to 10 bar	−10 °C to 90 °C (PTFE/NBR)	F05	9 × 9	—	18.2
BVWS*080	80	Vacuum to 10 bar	−10 °C to 90 °C (PTFE/NBR)	F05	9 × 9	—	28.6
BVWS*100	100	Vacuum to 10 bar	−10 °C to 90 °C (PTFE/NBR)	F07	11 × 11	—	44.2
BVWS*125	125	Vacuum to 10 bar	−10 °C to 90 °C (PTFE/NBR)	F07	14 × 14	—	66.3
BVWS*150	150	Vacuum to 10 bar	−10 °C to 90 °C (PTFE/NBR)	F07	14 × 14	—	101.4
BVWS*200	200	Vacuum to 10 bar	−10 °C to 90 °C (PTFE/NBR)	F10	17 × 17	—	149.5
BVWS*250	250	Vacuum to 10 bar	−10 °C to 90 °C (PTFE/NBR)	F10	22 × 22	—	227.5
BVWS*300	300	Vacuum to 10 bar	−10 °C to 90 °C (PTFE/NBR)	F10	22 × 22	—	377

* refers to operation type L (lever operated) or G (gear operated). Torque figures are seating torques for clean water duty — confirm with Global Water Group before actuator sizing.

COMPONENTS

No.	Item	Material
1	Body	CF8M stainless steel
2	Disc	CF8M stainless steel
3	Stem	SS 431
4	Stem bushing	PTFE
5	Seat	NBR moulded to PTFE (cartridge)
6	O-ring	NBR
7	Pin	SS 316

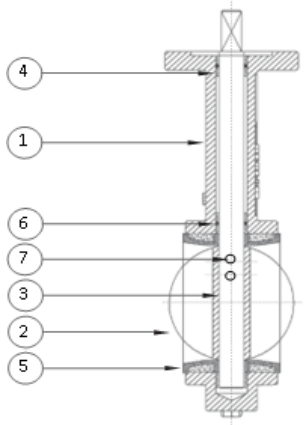


Fig. 1 — Component identification, numbered per table.

ISO 5211 TOP FLANGE

Flange	ØN (mm)	ØC1 (mm)	n1-Ød1
F05	65	50	4 – Ø8
F07	90	70	4 – Ø10
F10	125	102	4 – Ø12

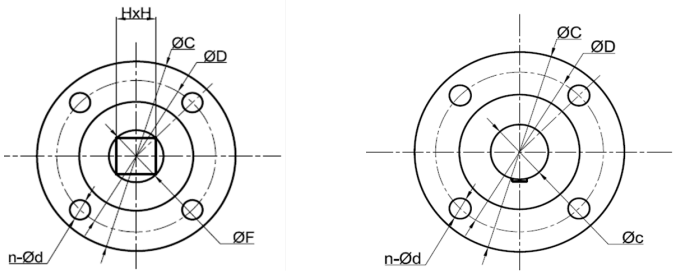


Fig. 2 — Top flange interface: square drive (left) and round drive (right).

DIMENSIONAL SPECIFICATIONS

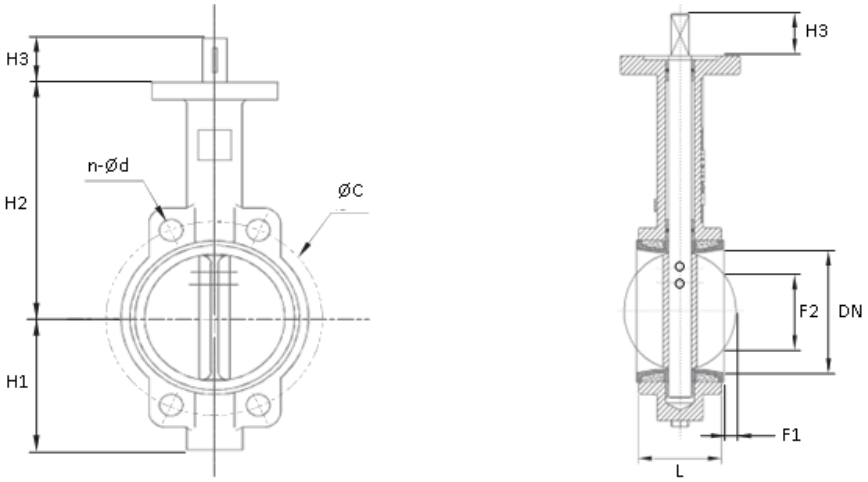


Fig. 3 — Front view (ØC, n-Ød) and sectional side view (L, F1, F2, H1–H3, DN).

BUTTERFLY VALVE — WAFER, LEVER OPERATED

								Table D		Table E		ANSI 150	
Code	DN	L	H1	H2	H3	F1	F2	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød
BVWSL050	50	43	57	143	29	3.2	25.1	114	4 – Ø18	114	4 – Ø18	120.6	4 – Ø19
BVWSL065	65	46	68	155	29	7.6	41.4	127	4 – Ø18	127	4 – Ø18	139.7	4 – Ø19
BVWSL080	80	46	82	160	29	14.9	61.8	146	4 – Ø18	146	4 – Ø18	152.4	4 – Ø19
BVWSL100	100	52	100	181	29	25.1	89.1	178	8 – Ø18	178	8 – Ø18	190.5	8 – Ø19
BVWSL125	125	56	112	194	29	32.6	108.7	210	8 – Ø18	210	8 – Ø18	215.9	8 – Ø22.4
BVWSL150	150	56	126	202	29	48.9	144.6	235	8 – Ø18	235	8 – Ø22	241.3	8 – Ø22.4
BVWSL200	200	60	162	240	35	70	192.5	292	8 – Ø18	292	8 – Ø22	298.4	8 – Ø22.4
BVWSL250	250	68	193	272	35	90.3	240.5	356	8 – Ø22	356	12 – Ø22	361.9	12 – Ø25.4
BVWSL300	300	78	236.5	318	35	111	290.8	404	12 – Ø22	406	12 – Ø26	431.8	12 – Ø25.4

BUTTERFLY VALVE — WAFER, GEAR OPERATED

								Table D		Table E		ANSI 150	
Code	DN	L	H1	H2	H3	F1	F2	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød
BVWSG050	50	43	57	143	29	3.2	25.1	114	4 – Ø18	114	4 – Ø18	120.6	4 – Ø19
BVWSG065	65	46	68	145	29	7.6	41.4	127	4 – Ø18	127	4 – Ø18	139.7	4 – Ø19
BVWSG080	80	46	82	160	29	14.9	61.8	146	4 – Ø18	146	4 – Ø18	152.4	4 – Ø19
BVWSG100	100	52	100	181	29	25.1	89.1	178	8 – Ø18	178	8 – Ø18	190.5	8 – Ø19
BVWSG125	125	56	112	194	29	32.6	108.7	210	8 – Ø18	210	8 – Ø18	215.9	8 – Ø22.4
BVWSG150	150	56	126	202	29	48.9	144.6	235	8 – Ø18	235	8 – Ø22	241.3	8 – Ø22.4
BVWSG200	200	60	162	240	35	70	192.5	292	8 – Ø18	292	8 – Ø22	298.4	8 – Ø22.4
BVWSG250	250	68	193	272	35	90.3	240.5	356	8 – Ø22	356	12 – Ø22	361.9	12 – Ø25.4
BVWSG300	300	78	236.5	318	35	111	290.8	406	12 – Ø22	406	12 – Ø26	431.8	12 – Ø25.4

All dimensions in millimetres unless stated. Flange patterns: Table D, Table E and ANSI 150.

ACCESSORIES

Gear operators and extension spindles for this valve are covered by separate data sheets: **BVG** Butterfly Valve Gear Boxes (standard or lockable, DN50–DN1200) and **BVES** Butterfly Valve Extensions (ductile iron extension spindles, DN50–DN600, 1 m / 1.5 m / 2 m).

STANDARDS & APPROVALS

- Design and manufacture according to API 609
- Inspection and testing according to API 598
- Flange drilling according to AS 2129 / AS 4087 and ANSI B16.5
- Actuator mounting according to ISO 5211

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

BUTTERFLY VALVES · PHENOLIC HARD BACK CARTRIDGE SEAT

BVL Lugged Butterfly Valve

16 bar rated, fully lugged ductile iron butterfly valve with a replaceable NBR cartridge seat on a phenolic hard back, for high-repetition and actuated service. DN50–DN600.

API 609 | API 598 | AS 2129 | ISO 5211



FEATURES

- 16 bar pressure rated
- Fully lugged ductile iron body with fusion bonded epoxy coating
- 316 stainless steel disc
- NBR resilient cartridge seat with phenolic hard back
- Replaceable seat
- Available in PN16 / Table D, Table E and ANSI 150 flange pattern
- Bi-directional with bubble tight sealing
- Blow-out proof stem
- Suitable for high repetition and actuated applications
- Flange seal design eliminating the need for flange gaskets
- ISO top mounting flange for ease of actuation
- Gearbox fitted as standard on all sizes 350 mm and above
- Design and manufacture according to API 609
- Inspection and test according to API 598
- Flange drilling according to AS 2129

Not suitable for end of line use unless fitted with a flange on the open side — required to support the cartridge seat.

TECHNICAL SPECIFICATION

Construction	**Lugged concentric seal on body butterfly valve**
Size	**50 mm – 600 mm**
Pressure rating	**PN16 (16 bar)**
Face to face	**According to API 609**
Flange drilling	**AS 4087 PN16 (Table D) AS 2129 Table E ANSI B16.5 #150**
Coatings	**Fusion bonded epoxy**
Mounting pad	**ISO 5211**
Temperature range	**−10 °C to 90 °C (nitrile)**

PRESSURE TESTING

BODY / SHELL	SEAT
2.4 MPa	**1.76** MPa

Inspection and test according to API 598.

CONTROLS & OPTIONS

Lever operation	**300 mm and below**
Gear operation	**50 mm – 600 mm**
Electric actuators	**12 V, 24 V, 240 V, 415 V**
Pneumatic actuators	**Single and double acting**
Valve extensions	**0.5 m to 2 m lengths**

MODEL CODES & OPERATING DATA

Model	DN (mm)	Pressure range	Temperature range	ISO 5211 top flange	Square H×H	Round Øc	Torque (Nm)
BVLNG050-*	50	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	11.7
BVLNG065-*	65	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	18.2
BVLNG080-*	80	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	28.6
BVLNG100-*	100	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	11 × 11	—	44.2
BVLNG125-*	125	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	14 × 14	—	66.3
BVLNG150-*	150	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	14 × 14	—	101.4
BVLNG200-*	200	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	17 × 17	—	149.5
BVLNG250-*	250	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	22 × 22	—	227.5
BVLNG300-*	300	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	22 × 22	—	377
BVLNG350-*	350	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	—	31.6	859.3
BVLNG400-*	400	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	33.15	1458.6
BVLNG450-*	450	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	38	1721.2
BVLNG500-*	500	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	41.15	2745.6
BVLNG600-*	600	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F16	—	50.65	3088.8

* refers to flange pattern D (Table D), E (Table E) or A (ANSI 150).

COMPONENTS

No.	Item	Material
1	Body	Ductile iron
2	Disc	SS 316
3	Stem	SS 420
4	Stem bushing	PTFE
5	Seat	NBR
6	O-ring	NBR
7	Pin	SS 316

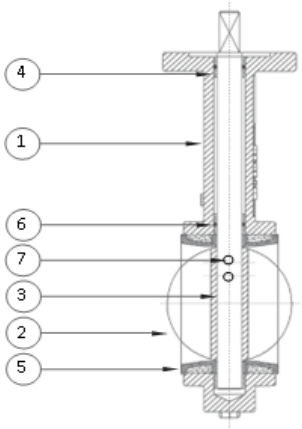


Fig. 1 — Component identification, numbered per table.

ISO 5211 TOP FLANGE

Flange	ØN (mm)	ØC1 (mm)	n1-Ød1
F05	65	50	4 – Ø8
F07	90	70	4 – Ø10
F10	125	102	4 – Ø12
F14	175	140	4 – Ø18
F16	210	165	4 – Ø22
F25	300	254	8 – Ø18
F30	350	298	8 – Ø22

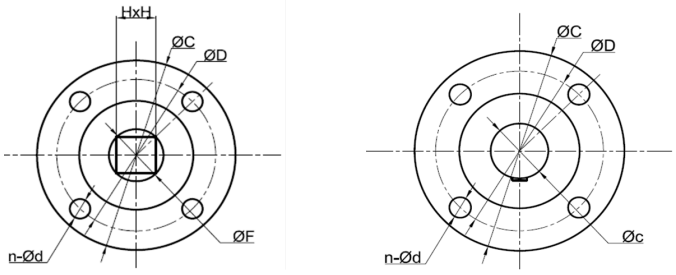


Fig. 2 — Top flange interface: square drive (left) and round drive (right).

DIMENSIONAL SPECIFICATIONS

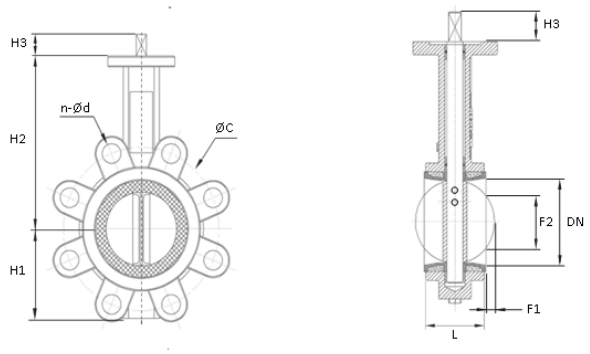


Fig. 3 — Front view (ØC, n-Ød) and sectional side view (L, F1, F2, H1–H3, DN).

BUTTERFLY VALVE — LUGGED, LEVER OPERATED

								Table D		Table E		ANSI 150	
Code	DN	L	H1	H2	H3	F1	F2	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød
BVLNL050-*	50	43	57	143	29	3.2	25.1	114	4 – Ø18	114	4 – Ø18	120.6	4 – Ø19
BVLNL065-*	65	46	68	155	29	7.6	41.4	127	4 – Ø18	127	4 – Ø18	139.7	4 – Ø19
BVLNL080-*	80	46	82	160	29	14.9	61.8	146	4 – Ø18	146	4 – Ø18	152.4	4 – Ø19
BVLNL100-*	100	52	100	181	29	25.1	89.1	178	8 – Ø18	178	8 – Ø18	190.5	8 – Ø19
BVLNL125-*	125	56	112	194	29	32.6	108.7	210	8 – Ø18	210	8 – Ø18	215.9	8 – Ø22.4
BVLNL150-*	150	56	126	202	29	48.9	144.6	235	8 – Ø18	235	8 – Ø22	241.3	8 – Ø22.4
BVLNL200-*	200	60	162	240	35	70	192.5	292	8 – Ø18	292	8 – Ø22	298.4	8 – Ø22.4
BVLNL250-*	250	68	193	272	35	90.3	240.5	356	8 – Ø22	356	12 – Ø22	361.9	12 – Ø25.4
BVLNL300-*	300	78	236.5	318	35	111	290.8	404	12 – Ø22	406	12 – Ø26	431.8	12 – Ø25.4

BUTTERFLY VALVE — LUGGED, GEAR OPERATED

								Table D		Table E		ANSI 150	
Code	DN	L	H1	H2	H3	F1	F2	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød
BVLNG050-*	50	43	57	143	29	3.2	25.1	114	4 – Ø18	114	4 – Ø18	120.6	4 – Ø19
BVLNG065-*	65	46	68	145	29	7.6	41.4	127	4 – Ø18	127	4 – Ø18	139.7	4 – Ø19
BVLNG080-*	80	46	82	160	29	14.9	61.8	146	4 – Ø18	146	4 – Ø18	152.4	4 – Ø19
BVLNG100-*	100	52	100	181	29	25.1	89.1	178	8 – Ø18	178	8 – Ø18	190.5	8 – Ø19
BVLNG125-*	125	56	112	194	29	32.6	108.7	210	8 – Ø18	210	8 – Ø18	215.9	8 – Ø22.4
BVLNG150-*	150	56	126	202	29	48.9	144.6	235	8 – Ø18	235	8 – Ø22	241.3	8 – Ø22.4
BVLNG200-*	200	60	162	240	35	70	192.5	292	8 – Ø18	292	8 – Ø22	298.4	8 – Ø22.4
BVLNG250-*	250	68	193	272	35	90.3	240.5	356	8 – Ø22	356	12 – Ø22	361.9	12 – Ø25.4
BVLNG300-*	300	78	236.5	318	35	111	290.8	406	12 – Ø22	406	12 – Ø26	431.8	12 – Ø25.4
BVLNG350-*	350	78	368	267	45	126.9	323.7	470	12 – Ø26	470	12 – Ø26	476.2	12 – Ø28.4
BVLNG400-*	400	102	400	298.6	51.2	149.7	378.8	521	12 – Ø26	521	12 – Ø26	539.7	16 – Ø28.4
BVLNG450-*	450	114	422	318	51.2	166	427.3	584	12 – Ø26	584	16 – Ø26	577.8	16 – Ø31.8
BVLNG500-*	500	127	480	355	64.2	178.4	472.8	641	16 – Ø26	641	16 – Ø26	635	20 – Ø31.8
BVLNG600-*	600	154	562	444	70.2	218.4	571.9	756	16 – Ø30	756	16 – Ø33	749.3	20 – Ø35.1

ACCESSORIES

Gear operators and extension spindles for this valve are covered by separate data sheets: **BVG** Butterfly Valve Gear Boxes (standard or lockable, DN50–DN1200) and **BVES** Butterfly Valve Extensions (ductile iron extension spindles, DN50–DN600, 1 m / 1.5 m / 2 m).

STANDARDS & APPROVALS

- Design and manufacture according to API 609
- Inspection and testing according to API 598
- Flange drilling according to AS 2129 / AS 4087 and ANSI B16.5
- Actuator mounting according to ISO 5211

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

BUTTERFLY VALVES · PHENOLIC HARD BACK CARTRIDGE SEAT · DUCTILE IRON NICKEL PLATED DISC

BVL Lugged Butterfly Valve

16 bar rated, fully lugged ductile iron butterfly valve with a ductile iron nickel plated disc and replaceable NBR cartridge seat on a phenolic hard back. Gear operated, DN350–DN600.

API 609 | API 598 | AS 4020 | ISO 5211



FEATURES

- 16 bar pressure rated
- Fully lugged ductile iron body with fusion bonded epoxy coating
- Ductile iron nickel plated disc
- NBR resilient cartridge seat with phenolic hard back
- Replaceable seat
- Available in PN16 / Table D and Table E flange pattern
- Bi-directional with bubble tight sealing
- Blow-out proof stem
- Suitable for high repetition and actuated applications
- Flange seal design eliminating the need for flange gaskets
- ISO top mounting flange for ease of actuation
- Gearbox fitted as standard on all sizes 350 mm and above
- Design and manufacture according to API 609
- Inspection and test according to API 598
- Flange drilling according to AS 2129

Not suitable for end of line use unless fitted with a flange on the open side — required to support the cartridge seat.

TECHNICAL SPECIFICATION

Construction	**Lugged concentric seal on body butterfly valve**
Size	**350 mm – 600 mm**
Pressure rating	**PN16 (16 bar)**
Face to face	**According to API 609**
Flange drilling	**AS 4087 PN16 (Table D)** **AS 2129 Table E**
Coatings	**Fusion bonded epoxy to AS 4158** **Jindapeng JDP20AEY, RAL 5005**
Mounting pad	**ISO 5211**
Temperature range	**−10 °C to 80 °C (nitrile)**

PRESSURE TESTING

BODY / SHELL	SEAT
2.4 MPa	**1.76** MPa

Inspection and test according to API 598. Pressure testing to AS 4795.1.

CONTROLS & OPTIONS

Gear operation	**350 mm – 600 mm**
Electric actuators	**12 V, 24 V, 240 V, 415 V**
Pneumatic actuators	**Single and double acting**
Valve extensions	**0.5 m to 2 m lengths**

MODEL CODES & OPERATING DATA

Model	DN (mm)	Pressure range	Temperature range	ISO 5211 top flange	Shaft Øc	Torque (Nm)
BVLNG350-DINP-*	350	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	31.6	859.3
BVLNG400-DINP-*	400	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	33.15	1458.6
BVLNG450-DINP-*	450	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	38	1721.2
BVLNG500-DINP-*	500	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	41.15	2745.6
BVLNG600-DINP-*	600	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F16	50.65	3088.8

* refers to flange pattern D (Table D) or E (Table E). Gear operated as standard across the range.

COMPONENTS

No.	Item	Material
1	Body	Ductile iron
2	Disc	Ductile iron, nickel plated
3	Stem	SS 420
4	Stem bushing	PTFE
5	Seat	NBR
6	O-ring	NBR
7	Pin	SS 316

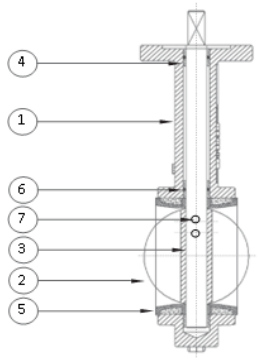


Fig. 1 — Component identification, numbered per table.

ISO 5211 TOP FLANGE

Flange	ØN (mm)	ØC1 (mm)	n1-Ød1
F05	65	50	4 – Ø8
F07	90	70	4 – Ø10
F10	125	102	4 – Ø12
F14	175	140	4 – Ø18
F16	210	165	4 – Ø22
F25	300	254	8 – Ø18
F30	350	298	8 – Ø22

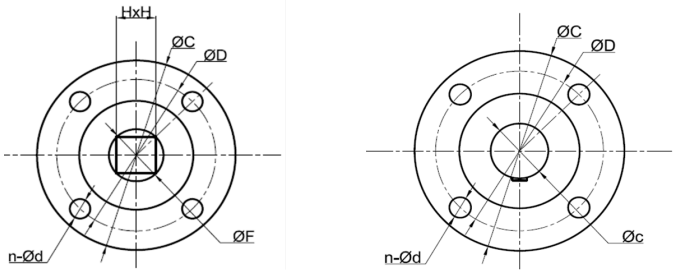


Fig. 2 — Top flange interface: square drive (left) and round drive (right).

DIMENSIONAL SPECIFICATIONS

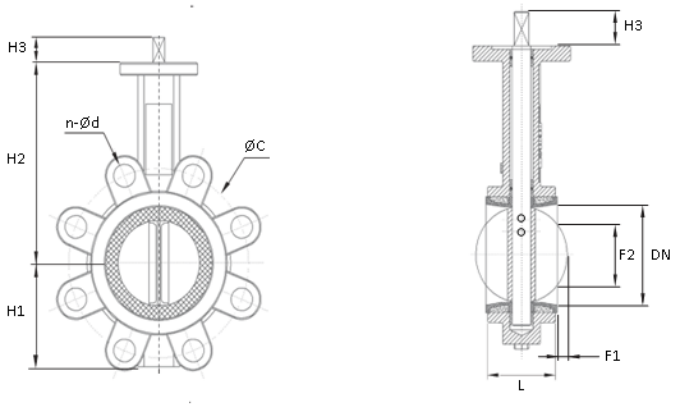


Fig. 3 — Front view (ØC, n-Ød) and sectional side view (L, F1, F2, H1–H3, DN).

BUTTERFLY VALVE — LUGGED, GEAR OPERATED

Code	DN	L	H1	H2	H3	F1	F2	Table D		Table E	
								ØC	n-Ød	ØC	n-Ød
BVLNG350-DINP-*	350	78	368	267	45	126.9	323.7	470	12 – Ø26	470	12 – Ø26
BVLNG400-DINP-*	400	102	400	298.6	51.2	149.7	378.8	521	12 – Ø26	521	12 – Ø26
BVLNG450-DINP-*	450	114	422	318	51.2	166	427.3	584	12 – Ø26	584	16 – Ø26
BVLNG500-DINP-*	500	127	480	355	64.2	178.4	472.8	641	16 – Ø26	641	16 – Ø26
BVLNG600-DINP-*	600	154	562	444	70.2	218.4	571.9	756	16 – Ø30	756	16 – Ø33

All dimensions in millimetres unless stated. * refers to flange pattern D (Table D) or E (Table E).

ACCESSORIES

Gear operators and extension spindles for this valve are covered by separate data sheets: **BVG** Butterfly Valve Gear Boxes (standard or lockable, DN50–DN1200) and **BVES** Butterfly Valve Extensions (ductile iron extension spindles, DN50–DN600, 1 m / 1.5 m / 2 m).

STANDARDS & APPROVALS

- Design and manufacture according to API 609
- Inspection and testing according to API 598
- Flange drilling according to AS 4087 PN16 (Table D) and AS 2129 (Table E)
- Pressure testing according to AS 4795.1
- Coating according to AS 4158; potable water compliance to AS 4020
- Actuator mounting according to ISO 5211

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

BUTTERFLY VALVES

BVLV Lugged Butterfly Valve

16 bar rated, fully lugged ductile iron butterfly valve with vulcanised seat for end-of-line isolation and high-repetition actuated service. DN50–DN600.

API 609 | API 598 | AS 2129 | ISO 5211



FEATURES

- 16 bar pressure rated — suitable for end of line service / isolation
- Fully lugged ductile iron body with fusion bonded epoxy coating
- 316 stainless steel disc
- Vulcanized NBR liner / seat suitable for vacuum operations
- Available in PN16 / Table D, Table E and ANSI 150 flange pattern
- Bi-directional with bubble tight sealing
- Blow-out proof stem
- Suitable for high repetition and actuated applications
- Flange seal design eliminating the need for flange gaskets
- ISO top mounting flange for ease of actuation
- Gearbox fitted as standard on all sizes 350mm and above
- Face to face and design per API 609; inspection and test per API 598
- Flange drilling according to AS 2129

TECHNICAL SPECIFICATION

Construction	**Lugged concentric seal on body butterfly valve**
Size	**50 mm – 600 mm**
Pressure rating	**PN16 (16 bar)**
Face to face	**According to API 609**
Flange drilling	**AS 4087 PN16 (Table D)** **AS 2129 Table E** **ANSI B16.5 #150**
Coatings	**Fusion bonded epoxy**
Mounting pad	**ISO 5211**
Temperature range	**−10 °C to 90 °C (nitrile)**

PRESSURE TESTING

BODY / SHELL	SEAT
2.4 MPa	**1.76** MPa

Inspection and test according to API 598.

CONTROLS & OPTIONS

Lever operation	**300 mm and below**
Gear operation	**50 mm – 600 mm**
Electric actuators	**12 V, 24 V, 240 V, 415 V**
Pneumatic actuators	**Single and double acting**
Valve extensions	**0.5 m to 2 m lengths**

MODEL CODES & OPERATING DATA

Model	DN (mm)	Pressure range	Temperature range	ISO 5211 top flange	Square H×H	Round Øc	Torque (Nm)
BVLVNG050-*	50	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	11.7
BVLVNG065-*	65	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	18.2
BVLVNG080-*	80	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	28.6
BVLVNG100-*	100	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	11 × 11	—	44.2
BVLVNG125-*	125	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	14 × 14	—	66.3
BVLVNG150-*	150	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	14 × 14	—	101.4
BVLVNG200-*	200	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	17 × 17	—	149.5
BVLVNG250-*	250	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	22 × 22	—	227.5
BVLVNG300-*	300	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	22 × 22	—	377
BVLVNG350-*	350	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	—	31.6	859.3
BVLVNG400-*	400	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	33.15	1458.6
BVLVNG450-*	450	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	38	1721.2
BVLVNG500-*	500	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	41.15	2745.6
BVLVNG600-*	600	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F16	—	50.65	3088.8

* refers to flange pattern D (Table D), E (Table E) or A (ANSI 150).

COMPONENTS

No.	Item	Material
1	Body	Ductile iron
2	Disc	SS 316
3	Stem	SS 420
4	Stem bushing	PTFE
5	Seat	NBR
6	O-ring	NBR
7	Pin	SS 316

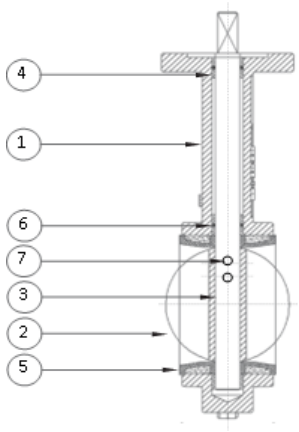


Fig. 1 — Component identification, numbered per table.

ISO 5211 TOP FLANGE

Flange	ØN (mm)	ØC1 (mm)	n1-Ød1
F05	65	50	4 – Ø8
F07	90	70	4 – Ø10
F10	125	102	4 – Ø12
F14	175	140	4 – Ø18
F16	210	165	4 – Ø22
F25	300	254	8 – Ø18
F30	350	298	8 – Ø22

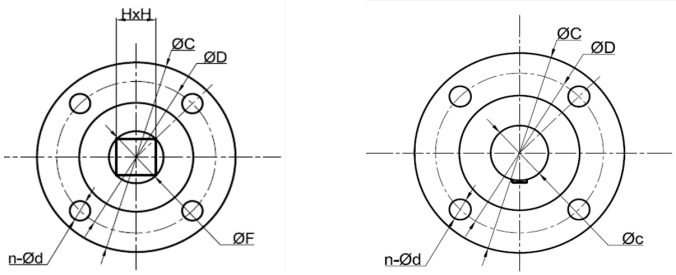


Fig. 2 — Top flange interface: square drive (left) and round drive (right).

DIMENSIONAL SPECIFICATIONS

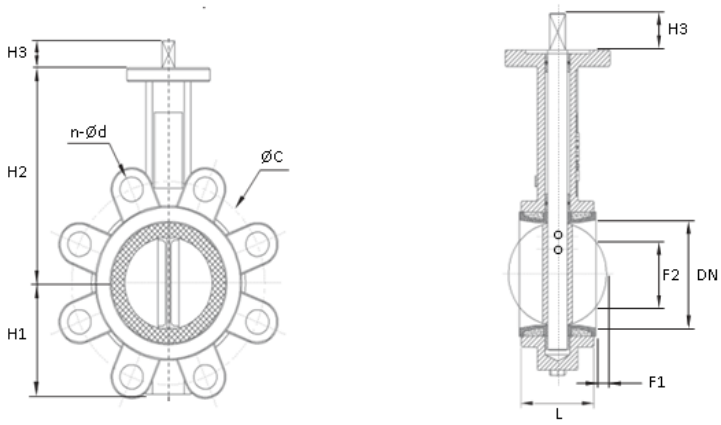


Fig. 3 — Front view (ØC, n-Ød) and sectional side view (L, F1, F2, H1–H3, DN).

BUTTERFLY VALVE — LUGGED, LEVER OPERATED

								Table D		Table E		ANSI 150	
Code	DN	L	H1	H2	H3	F1	F2	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød
BVLVNL050-*	50	43	57	143	29	3.2	25.1	114	4 – Ø18	114	4 – Ø18	120.6	4 – Ø19
BVLVNL065-*	65	46	68	155	29	7.6	41.4	127	4 – Ø18	127	4 – Ø18	139.7	4 – Ø19
BVLVNL080-*	80	46	82	160	29	14.9	61.8	146	4 – Ø18	146	4 – Ø18	152.4	4 – Ø19
BVLVNL100-*	100	52	100	181	29	25.1	89.1	178	8 – Ø18	178	8 – Ø18	190.5	8 – Ø19
BVLVNL125-*	125	56	112	194	29	32.6	108.7	210	8 – Ø18	210	8 – Ø18	215.9	8 – Ø22.4
BVLVNL150-*	150	56	126	202	29	48.9	144.6	235	8 – Ø18	235	8 – Ø22	241.3	8 – Ø22.4
BVLVNL200-*	200	60	162	240	35	70	192.5	292	8 – Ø18	292	8 – Ø22	298.4	8 – Ø22.4
BVLVNL250-*	250	68	193	272	35	90.3	240.5	356	8 – Ø22	356	12 – Ø22	361.9	12 – Ø25.4
BVLVNL300-*	300	78	236.5	318	35	111	290.8	404	12 – Ø22	406	12 – Ø26	431.8	12 – Ø25.4

BUTTERFLY VALVE — LUGGED, GEAR OPERATED

								Table D		Table E		ANSI 150	
Code	DN	L	H1	H2	H3	F1	F2	ØC	n-Ød	ØC	n-Ød	ØC	n-Ød
BVLVNG050-*	50	43	57	143	29	3.2	25.1	114	4 – Ø18	114	4 – Ø18	120.6	4 – Ø19
BVLVNG065-*	65	46	68	145	29	7.6	41.4	127	4 – Ø18	127	4 – Ø18	139.7	4 – Ø19
BVLVNG080-*	80	46	82	160	29	14.9	61.8	146	4 – Ø18	146	4 – Ø18	152.4	4 – Ø19
BVLVNG100-*	100	52	100	181	29	25.1	89.1	178	8 – Ø18	178	8 – Ø18	190.5	8 – Ø19
BVLVNG125-*	125	56	112	194	29	32.6	108.7	210	8 – Ø18	210	8 – Ø18	215.9	8 – Ø22.4
BVLVNG150-*	150	56	126	202	29	48.9	144.6	235	8 – Ø18	235	8 – Ø22	241.3	8 – Ø22.4
BVLVNG200-*	200	60	162	240	35	70	192.5	292	8 – Ø18	292	8 – Ø22	298.4	8 – Ø22.4
BVLVNG250-*	250	68	193	272	35	90.3	240.5	356	8 – Ø22	356	12 – Ø22	361.9	12 – Ø25.4
BVLVNG300-*	300	78	236.5	318	35	111	290.8	406	12 – Ø22	406	12 – Ø26	431.8	12 – Ø25.4
BVLVNG350-*	350	78	368	267	45	126.9	323.7	470	12 – Ø26	470	12 – Ø26	476.2	12 – Ø28.4
BVLVNG400-*	400	102	400	298.6	51.2	149.7	378.8	521	12 – Ø26	521	12 – Ø26	539.7	16 – Ø28.4

All dimensions in millimetres unless stated. * refers to flange pattern D, E or A (ANSI 150).

ACCESSORIES

Gear operators and extension spindles for this valve are covered by separate data sheets: **BVG** Butterfly Valve Gear Boxes (standard or lockable, DN50–DN1200) and **BVES** Butterfly Valve Extensions (ductile iron extension spindles, DN50–DN600, 1 m / 1.5 m / 2 m).

STANDARDS & APPROVALS

- Design and manufacture according to API 609
- Inspection and testing according to API 598
- Flange drilling according to AS 2129 / AS 4087 and ANSI B16.5
- Actuator mounting according to ISO 5211

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

BUTTERFLY VALVES

BVF Flanged Butterfly Valve

16 bar rated, double-flanged ductile iron butterfly valve with vulcanised seat for end-of-line isolation and high-repetition actuated service. DN50–DN600.

EN 558-1 | ISO 5208 | AS 4087 | ISO 5211



FEATURES

- 16 bar pressure rated — suitable for end of line service / isolation
- Double-flanged ductile iron body with fusion bonded epoxy coating
- 316 stainless steel disc
- Vulcanised NBR liner / seat suitable for vacuum operations
- Available in PN16 / Table D and Table E flange pattern
- Bi-directional with bubble tight sealing
- Blow-out proof stem
- Suitable for high repetition and actuated applications
- Flange seal design eliminating the need for flange gaskets
- ISO top mounting flange for ease of actuation
- Gearbox fitted as standard on all sizes 350 mm and above
- Inspection and test according to ISO 5208
- Top flange drilling according to ISO 5211
- Fasteners: 316 stainless steel

TECHNICAL SPECIFICATION

Construction	**Flanged concentric seal on body butterfly valve**
Size	**50 mm – 600 mm**
Pressure rating	**PN16 (16 bar)**
Face to face	**According to EN 558-1, 13 Series**
Flange drilling	**AS 4087 PN16 (Table D) AS 2129 Table E**
Coatings	**Fusion bonded epoxy**
Mounting pad	**ISO 5211**
Temperature range	**−10 °C to 90 °C (nitrile)**

PRESSURE TESTING

BODY / SHELL	SEAT
2.4 MPa	**1.76** MPa

Inspection and test according to ISO 5208.

CONTROLS & OPTIONS

Lever operation	**300 mm and below**
Gear operation	**50 mm – 600 mm**
Electric actuators	**12 V, 24 V, 240 V, 415 V**
Pneumatic actuators	**Single and double acting**
Valve extensions	**0.5 m to 2 m lengths**

MODEL CODES & OPERATING DATA

Model	DN (mm)	Pressure range	Temperature range	ISO 5211 top flange	Square H×H	Round Øc	Torque (Nm)
BVFN*050	50	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	11.7
BVFN*065	65	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	18.2
BVFN*080	80	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F05	9 × 9	—	28.6
BVFN*100	100	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	11 × 11	—	44.2
BVFN*125	125	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	14 × 14	—	66.3
BVFN*150	150	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F07	14 × 14	—	101.4
BVFN*200	200	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	17 × 17	—	149.5
BVFN*250	250	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	22 × 22	—	227.5
BVFN*300	300	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	22 × 22	—	377
BVFNG350	350	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F10	—	31.6	859.3
BVFNG400	400	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	33.15	1458.6
BVFNG450	450	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	38	1721.2
BVFNG500	500	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F14	—	41.15	2745.6
BVFNG600	600	Vacuum to 16 bar	−29 °C to 90 °C (NBR)	F16	—	50.65	3088.8

* refers to operation type L (lever operated) or G (gear operated).

COMPONENTS

No.	Item	Material
1	Body	Ductile iron
2	Disc	SS 316
3	Stem	SS 420
4	Stem bushing	PTFE
5	Seat	NBR
6	O-ring	NBR
7	Pin	SS 316

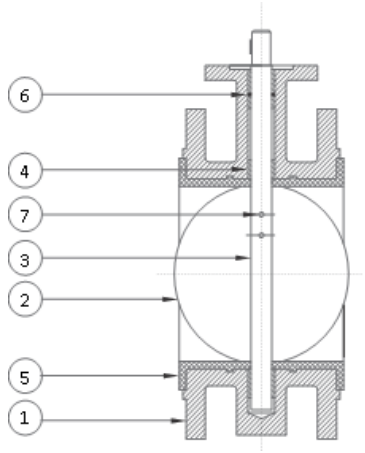


Fig. 1 — Component identification, numbered per table.

ISO 5211 TOP FLANGE

Flange	ØN (mm)	ØC1 (mm)	n1-Ød1
F05	65	50	4 – Ø8
F07	90	70	4 – Ø10
F10	125	102	4 – Ø12
F14	175	140	4 – Ø18
F16	210	165	4 – Ø22
F25	300	254	8 – Ø18
F30	350	298	8 – Ø22

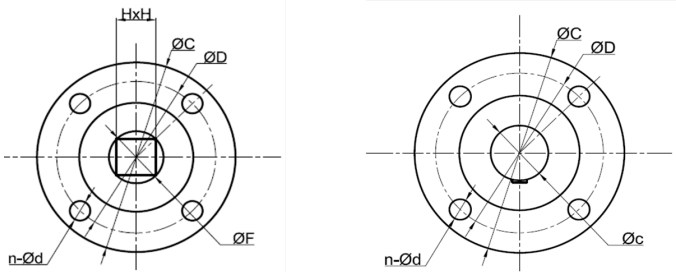


Fig. 2 — Top flange interface: square drive (left) and round drive (right).

DIMENSIONAL SPECIFICATIONS

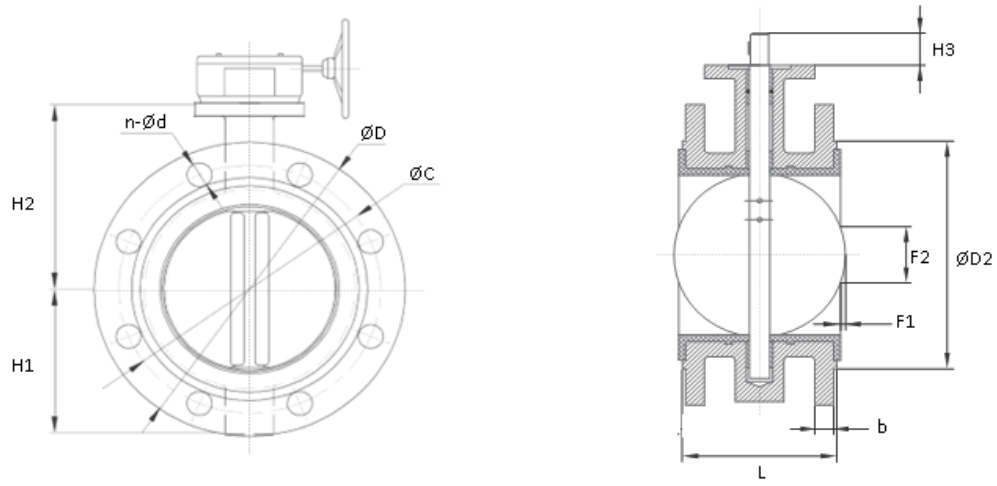


Fig. 3 — Front view (ØC, ØD, n-Ød) and sectional side view (L, b, F1, F2, H1–H3, ØD2).

BUTTERFLY VALVE — FLANGED, LEVER OPERATED

Code	DN	L	H1	H2	H3	F1	F2	b	ØD	ØD2	Table D		Table E	
											ØC	n-Ød	ØC	n-Ød
BVFNL050-*	50	108	80	110	29	0	0	15.4	150	99	114	4 – Ø18	114	4 – Ø18
BVFNL065-*	65	112	80	134	29	0	0	15.4	165	118	127	4 – Ø18	127	4 – Ø18
BVFNL080-*	80	114	95	131	29	0	0	15	185	132	146	4 – Ø18	146	4 – Ø18
BVFNL100-*	100	127	114	150	29	0	0	17	215	158	178	8 – Ø18	178	8 – Ø18
BVFNL125-*	125	140	113	170	29	0	0	18	255	186	210	8 – Ø18	210	8 – Ø18
BVFNL150-*	150	140	139	180	29	4.5	52	20	280	211	235	8 – Ø18	235	8 – Ø22
BVFNL200-*	200	152	175	210	35	25.45	134.4	20	335	268	292	8 – Ø18	292	8 – Ø22
BVFNL250-*	250	165	204	246	35	43.25	189.81	21	405	328	356	8 – Ø22	356	12 – Ø22
BVFNL300-*	300	178	242	276	35	61.75	243.4	26	455	378	404	12 – Ø22	406	12 – Ø26

BUTTERFLY VALVE — FLANGED, GEAR OPERATED

Code	DN	L	H1	H2	H3	F1	F2	b	ØD	ØD2	Table D		Table E	
											ØC	n-Ød	ØC	n-Ød
BVFNG050-*	50	108	80	110	29	0	0	15.4	150	99	114	4 – Ø18	114	4 – Ø18
BVFNG065-*	65	112	80	134	29	0	0	15.4	165	118	127	4 – Ø18	127	4 – Ø18
BVFNG080-*	80	114	95	131	29	0	0	15	185	132	146	4 – Ø18	146	4 – Ø18
BVFNG100-*	100	127	114	150	29	0	0	17	215	158	178	8 – Ø18	178	8 – Ø18
BVFNG125-*	125	140	113	170	29	0	0	18	255	186	210	8 – Ø18	210	8 – Ø18
BVFNG150-*	150	140	139	180	29	4.5	52	20	280	211	235	8 – Ø18	235	8 – Ø22
BVFNG200-*	200	152	175	210	35	25.45	134.4	20	335	268	292	8 – Ø18	292	8 – Ø22
BVFNG250-*	250	165	204	246	35	43.25	189.81	21	405	328	356	8 – Ø22	356	12 – Ø22
BVFNG300-*	300	178	242	276	35	61.75	243.4	26	455	378	406	12 – Ø22	406	12 – Ø26
BVFNG350-*	350	190	253	312	45	71.95	274.57	29	525	429	470	12 – Ø26	470	12 – Ø26
BVFNG400-*	400	216	282	343	51.2	87.1	324.96	29	580	480	521	12 – Ø26	521	12 – Ø26

All dimensions in millimetres unless stated. * refers to flange pattern D (Table D) or E (Table E).

ACCESSORIES

Gear operators and extension spindles for this valve are covered by separate data sheets: **BVG** Butterfly Valve Gear Boxes (standard or lockable, DN50–DN1200) and **BVES** Butterfly Valve Extensions (ductile iron extension spindles, DN50–DN600, 1 m / 1.5 m / 2 m).

STANDARDS & APPROVALS

- Face to face according to EN 558-1, 13 Series
- Inspection and testing according to ISO 5208
- Flange drilling according to AS 4087 PN16 (Table D) and AS 2129 (Table E)
- Top flange drilling / actuator mounting according to ISO 5211

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

Check Valves

CHECK VALVES · WAFER PATTERN

CVWD Dual Disc Wafer Check Valve

Spring assisted dual disc wafer check valve with a fusion bonded epoxy coated ductile iron body, twin 316 stainless steel discs and an NBR seat. DN50 to DN600, PN16.

DUCTILE IRON · FBE | DN50 – DN600 | PN16 / 1600 KPA | DUAL SS316 DISC



FEATURES

- PN16 pressure rated
- Ductile iron body with fusion bonded epoxy coating
- Dual 316 stainless steel disc
- NBR liner / seat as standard configuration
- Spring assisted closing
- For use where AS 4087 PN16, AS 2129 Table D, Table E and ANSI 150 flange patterns are required

APPLICATIONS

- Mine site dewatering
- Raw water
- Wastewater treatment
- Salt water applications
- Irrigation
- Abrasive slurries
- Corrosive chemicals
- Fire protection
- Mining and industrial applications

TECHNICAL SPECIFICATIONS

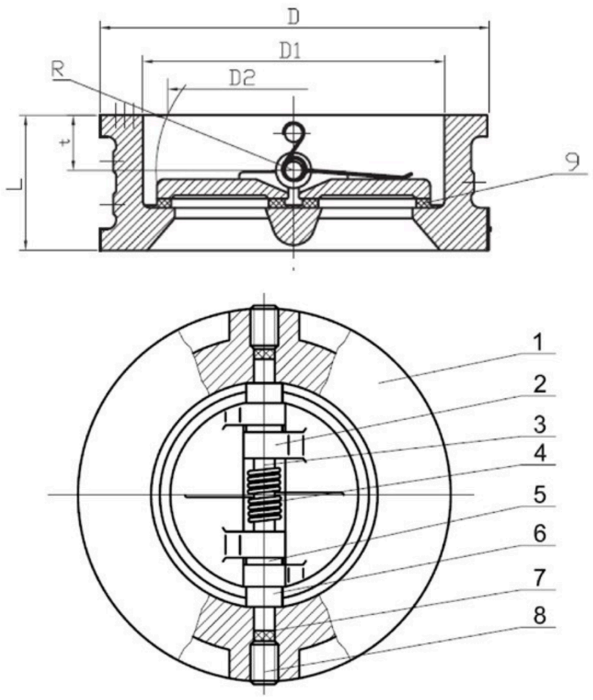
Flange compatibility	ANSI 150, AS 4087 PN16, AS 2129 Table D and Table E
Face to face	API 609
Test and inspection	API 598
Working pressure	1600 kPa
Temperature max	90 °C

DIMENSIONS

Code	DN (mm)	L (mm)	D (mm)	D1 (mm)	D2 (mm)	Weight (kg)
CVWDN050	50	43	98	65	46	1.3
CVWDN065	65	46	110	80	60	2.1
CVWDN080	80	64	128	94	70	2.9
CVWDN100	100	64	156	117	88	4.3
CVWDN125	125	70	187	145	115	6.4
CVWDN150	150	76	213	171	134	9.1
CVWDN200	200	89	267	224	182	15.2
CVWDN250	250	114	328	265	220	26.5
CVWDN300	300	114	375	310	260	37
CVWDN350	350	127	444	360	298	55
CVWDN400	400	140	495	410	350	80
CVWDN450	450	152	558	450	385	101
CVWDN500	500	152	615	505	438	114
CVWDN600	600	178	727	624	538	172

All dimensions in millimetres. L face-to-face, D body OD, D1 seat OD, D2 disc OD.

CONSTRUCTION DETAIL



No	Item	Material
1	Body	FBE coated cast iron
2	Disc	SS316
3	Stem	SS316
4	Spring	SS304
5	Washer	PTFE
6	Washer	PTFE
7	O-ring	EPDM
8	Hex nut	SS304
9	Seat	NBR

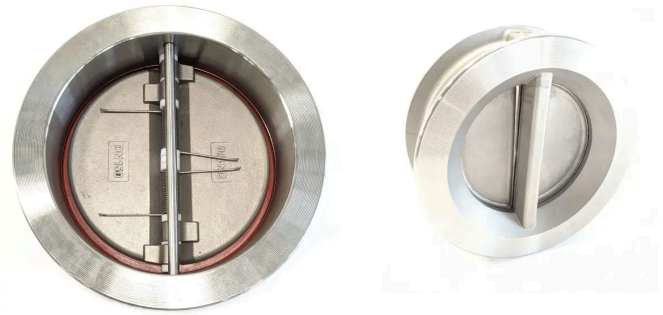
Sectional and face views — item numbers as tabled alongside.

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

CHECK VALVES · WAFER PATTERN

CVWDS Stainless Steel Dual Disc Wafer Check Valve

Spring assisted dual disc wafer check valve in full 316 stainless steel — body, discs, stem and spring — with an NBR seat. DN50 to DN600, PN16.



FULL 316 STAINLESS | DN50 – DN600 | PN16 / 1600 KPA | DUAL SS316 DISC

FEATURES

- PN16 pressure rated
- Full 316 stainless steel body — no coating to damage or maintain
- Dual 316 stainless steel disc
- NBR liner / seat as standard configuration
- Spring assisted closing
- For use where AS 4087 PN16, AS 2129 Table D, Table E and ANSI 150 flange patterns are required

APPLICATIONS

- Mine site dewatering
- Raw water
- Wastewater treatment
- Salt water and desalination
- Irrigation
- Abrasive slurries
- Corrosive chemicals
- Fire protection
- Mining and industrial applications

TECHNICAL SPECIFICATIONS

Flange compatibility	ANSI 150, AS 4087 PN16, AS 2129 Table D and Table E
Face to face	API 609
Test and inspection	API 598
Working pressure	1600 kPa
Temperature max	90 °C
Applications	Water

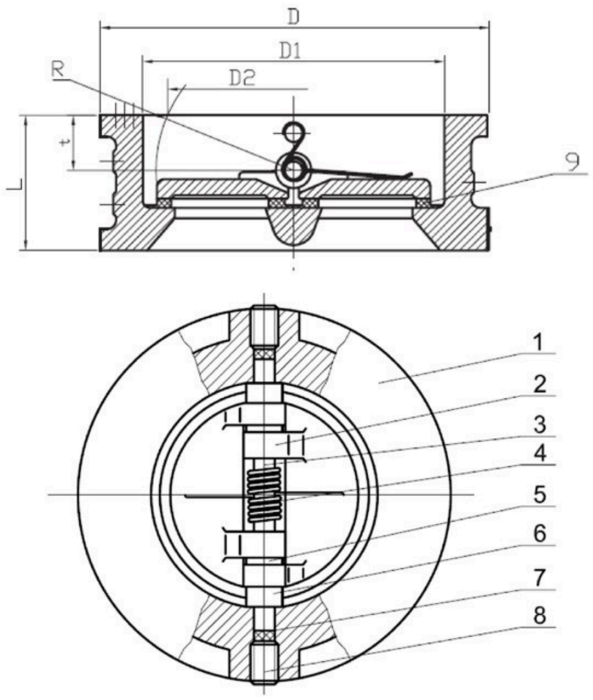
Other configurations can be manufactured upon request.

DIMENSIONS

Code	DN (mm)	L (mm)	D (mm)	D1 (mm)	D2 (mm)	Weight (kg)
CVWDS050	50	43	98	65	46	1.3
CVWDS065	65	46	110	80	60	2.1
CVWDS080	80	64	128	94	70	2.9
CVWDS100	100	64	156	117	88	4.3
CVWDS125	125	70	187	145	115	6.4
CVWDS150	150	76	213	171	134	9.1
CVWDS200	200	89	267	224	182	15.2
CVWDS250	250	114	328	265	220	26.5
CVWDS300	300	114	375	310	260	37
CVWDS350	350	127	444	360	298	55
CVWDS400	400	140	495	410	350	80
CVWDS450	450	152	558	450	385	101
CVWDS500	500	152	615	505	438	114
CVWDS600	600	178	727	624	538	172

All dimensions in millimetres. L face-to-face, D body OD, D1 seat OD, D2 disc OD.

CONSTRUCTION DETAIL



No	Item	Material
1	Body	SS316
2	Disc	SS316
3	Stem	SS316
4	Spring	SS316
5	Washer	PTFE
6	Washer	PTFE
7	O-ring	NBR
8	Hex nut	SS316
9	Seat	NBR

Sectional and face views — item numbers as tabled alongside.

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

CHECK VALVES · WAFER PATTERN

CVWS Single Disc Wafer Check Valve

Single disc swing pattern wafer check valve with an epoxy coated cast iron body and an SS316 disc on a top mounted hinge pin. Short face-to-face wafer body fits between PN16 flanges without additional support.

SINGLE DISC | WAFER BODY | PN16 DRILLING | DIN 3202-K3



FEATURES

- Spring assisted single disc swing action for fast, quiet closure
- Epoxy coated cast iron wafer body
- SS316 disc, hinge pin and spring
- Resilient seat for tight low pressure sealing
- Short face-to-face body reduces installed weight and pipe loading
- Lifting eye fitted for safe handling on larger sizes

APPLICATIONS

- Mine site dewatering
- Raw water
- Wastewater treatment
- Irrigation
- Pump discharge protection
- Fire protection
- Mining and industrial applications

TECHNICAL SPECIFICATIONS

Face to face	DIN 3202-K3
Pressure rating	PN16 / 16 bar
Flange drilling	EN 1092-2 PN16
Body	Epoxy coated cast iron
Disc, hinge pin, spring	Stainless steel 316
Applications	Water

Size range, dimensions, weights and seat material are confirmed on order. Other configurations can be manufactured upon request.

DIMENSIONS (MM)

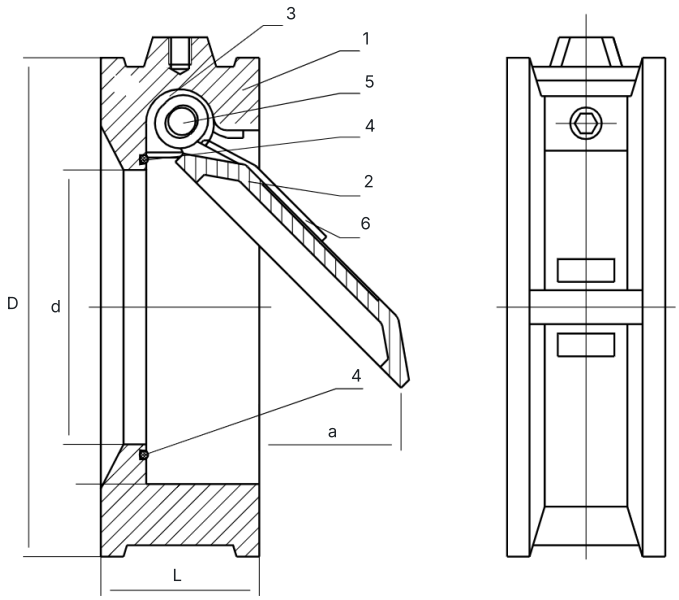
DN	L	D EN 1092-2 PN16	a	d
50	44.5	106	29	33
65	48	126	30	47
80	51	141	56	52
100	57	161	75	76
125	63.5	191	95	95
150	70	217	114	121
200	73	272	156	168
250	79	337	187	194
300	86	382	222	241
350	108	446	229	267
400	108	515	248	318
450	108	550	300	356
500	140	610	324	387
600	152	733	387	423

PARTS LIST

No.	Name	Material
1	Body	Cast iron / ductile iron
2	Disc	SS316
3	Hinge arm	Stainless steel
4	Seat	NBR
5	Hinge pin	SS316
6	Spring	SS316

Item numbers refer to the sectional view above.

CONSTRUCTION DETAIL



Sectional view (left) showing the single disc swung open on its top hinge pin, and outlet face view (right). Reference dimensions D body OD, d seat bore, a seat face, L face-to-face.

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

CHECK VALVES · WAFER PATTERN

CVWSPS Stainless Steel Wafer Swing Check Valve

316 stainless steel wafer swing check valve to suit a wide range of flange standards including ANSI 150 and DIN PN10/PN16. Body, disc and stem in 316 stainless steel with an NBR seat. Pressure range to 16 bar and media temperatures from -20°C to 180°C.

316 STAINLESS | WAFER BODY | ANSI 150 · PN10/16 | DIN 3202-K3



FEATURES

- Spring assisted single disc swing action for fast, quiet closure
- Full 316 stainless steel body, disc and stem
- NBR seat as standard — other seat materials available upon request
- Media temperatures from -20°C to 180°C
- Suits ANSI 150 and DIN PN10/PN16 flanges; face to face DIN 3202-K3
- Pressure tested to API 598

APPLICATIONS

- Water treatment
- Gas industry applications
- Back flow prevention on liquid and gas lines
- Corrosive and hygienic duties
- Pump discharge protection
- Fire protection
- Mining and industrial applications

TECHNICAL SPECIFICATIONS

Face to face	DIN 3202-K3
Pressure rating	PN16 / 16 bar
Flange drilling	ANSI 150, DIN PN10 / PN16
Body, disc, stem	316 stainless steel
Seat	NBR (other materials on request)
Temperature range	-20°C to 180°C
Pressure testing	API 598 — shell 2.4 MPa, seal 1.76 MPa

PART NUMBERS & DIMENSIONS (MM) — DIN 3202-K3

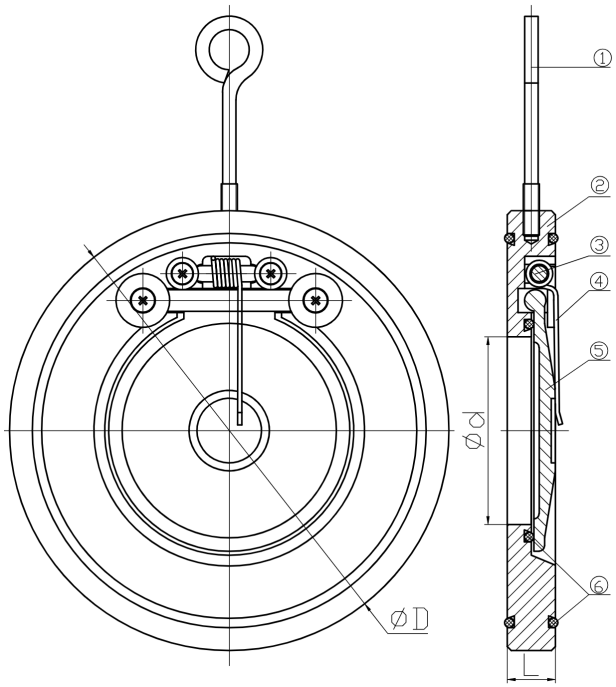
Part no.	Size	L	Ø d	Ø D PN16
CVWSPS050	DN50	14	32	107
CVWSPS065	DN65	14	40	127
CVWSPS080	DN80	14	54	142
CVWSPS100	DN100	18	70	162
CVWSPS125	DN125	18	92	192
CVWSPS150	DN150	20	112	218
CVWSPS200	DN200	22	154	272
CVWSPS250	DN250	26	200	328
CVWSPS300	DN300	32	240	378
CVWSPS350	DN350	38	270	447
CVWSPS400	DN400	44	310	495
CVWSPS450	DN450	44	360	557
CVWSPS500	DN500	56	405	619
CVWSPS600	DN600	62	585	734

PARTS LIST

No.	Part name	Material
1	Hook	316 stainless steel
2	Body	316 stainless steel
3	Screw	316 stainless steel
4	Spring	316 stainless steel
5	Disc	316 stainless steel
6	O-ring seat	NBR

Item numbers refer to the sectional view below. All wetted metal parts in 316 stainless steel; NBR seat as standard with EPDM, PTFE and Viton available on request.

CONSTRUCTION DETAIL



Inlet face view (left) and section through the body (right) showing the spring loaded single disc on its top hinge. Reference dimensions Ø D body OD, Ø d seat bore, L face to face.

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

CHECK VALVES · SWING PATTERN

CVFRS Resilient Seat Swing Check Valve

Flanged swing check valve with a fusion bonded epoxy coated ductile iron body, NBR encapsulated ductile iron disc and a vulcanised NBR seat. DN50 to DN300, PN16.

DUCTILE IRON · FBE | DN50 – DN300 | PN16 / 1600 KPA | VULCANISED NBR SEAT



FEATURES

- PN16 pressure rated
- Flanged ductile iron body with fusion bonded epoxy coating
- NBR rubber encapsulated ductile iron disc
- Vulcanised NBR liner / seat as standard configuration
- Low head loss from the aerodynamic streamlined body form
- Single one piece moving disc — no external counterweights required to aid sealing
- Available in AS 2129 Table D and Table E flange patterns

APPLICATIONS

- Mine site dewatering
- Raw water
- Wastewater treatment
- Salt water applications
- Irrigation
- Abrasive slurries
- Corrosive chemicals
- Fire protection
- Mining and industrial applications

TECHNICAL SPECIFICATIONS

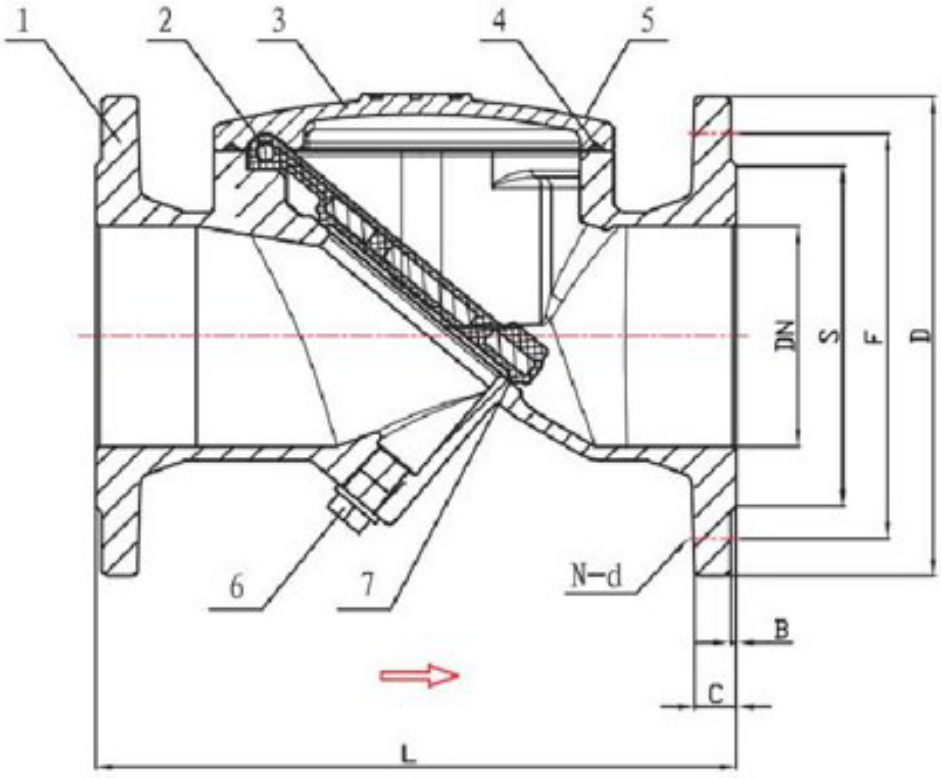
Flange compatibility	AS 2129 Table D and Table E
Size range	DN50 to DN300
Pressure range	0 to 16 bar (1600 kPa)
Media temperature	0 to 80 °C
Seat	Vulcanised NBR
Applications	Water

DIMENSIONS

Code	DN (mm)	Flange	S	F	D	B	C	L	N-d	Weight (kg)
CVFRSE050	50	Table D/E	99	125	165	3	19	203	4 – 18	—
CVFRSE065	65	Table D/E	118	145	185	3	19	216	4 – 18	—
CVFRSE080	80	Table D/E	132	160	200	3	19	241	4 – 18	15
CVFRSE100	100	Table D/E	156	180	220	3	19	292	8 – 18	21
CVFRSE150	150	Table D/E	211	240	285	3	19	356	8 – 22	40
CVFRSE200	200	Table D/E	266	295	340	3	20	495	8 – 22	76
CVFRSE250	250	Table D/E	319	355	405	3	22	622	12 – 22	122
CVFRSE300	300	Table D/E	370	410	460	4	24.5	698	12 – 26	218
CVFRSD100	100	Table D	156	180	220	3	19	292	4 – 18	21
CVFRSD250	250	Table D	319	355	405	3	22	622	8 – 22	122

All dimensions in millimetres. L face-to-face, D flange OD, F bolt circle, S seat bore, B / C flange detail, N-d number and diameter of bolt holes.

CONSTRUCTION DETAIL



No	Item	Material
1	Body	FBE coated ductile iron
2	Core rod	2Cr13 stainless steel
3	Cover	FBE coated ductile iron
4	Cover gasket	NBR
5	Bolts	SS304
6	Drain plug	BSPT SS304
7	Disc	NBR coated ductile iron

Sectional view — item numbers as tabled alongside; arrow indicates flow direction.

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

CHECK VALVES · SWING PATTERN

CVFSA150 Flanged Stainless Steel Swing Check Valve

ANSI 150 flanged 316 stainless steel swing check valve with an integral metal seat. The full bore body and recessed disc pocket give a large flow rate and low head loss when fully open. DN50 to DN300, 0 to 20 bar.

316 STAINLESS STEEL | DN50 – DN300 | ANSI 150 · 20 BAR | INTEGRAL METAL SEAT



FEATURES

- Sizes 50 mm to 300 mm
- ANSI 150 flange pattern
- 316 stainless steel body (ASTM A351-CF8M)
- Integral metal seat
- Pressure range 0 to 20 bar
- Media temperature 0 to 220 °C
- Full bore design with a recess for the disc to sit in when fully open — large flow rate, low head loss

APPLICATIONS

- Liquid fuels
- Diesel
- Oils

STANDARDS

- Designed to ASME B16.34
- Flanges to ASME/ANSI B16.5
- Face to face to ASME B16.10
- Testing and inspection to API 598

OPERATIONAL SPECIFICATIONS

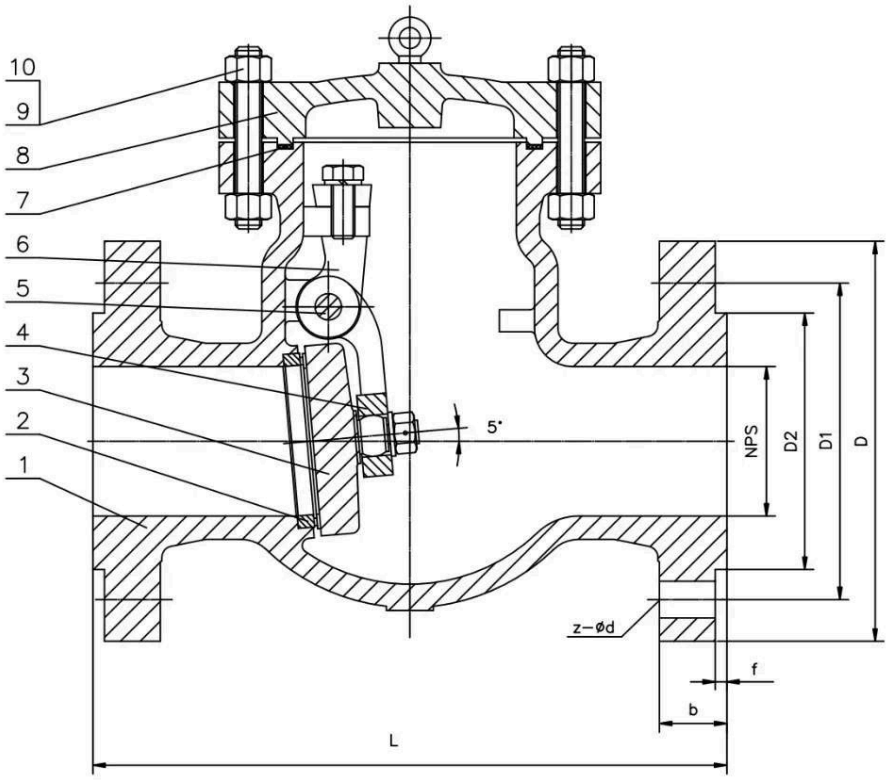
Model	DN (mm)	Pressure range	Media temperature	Weight (kg)
CVFSA150-050	50	0 to 20 bar	0 to 220 °C	12
CVFSA150-065	65	0 to 20 bar	0 to 220 °C	15
CVFSA150-080	80	0 to 20 bar	0 to 220 °C	21
CVFSA150-100	100	0 to 20 bar	0 to 220 °C	36
CVFSA150-125	125	0 to 20 bar	0 to 220 °C	47
CVFSA150-150	150	0 to 20 bar	0 to 220 °C	61
CVFSA150-200	200	0 to 20 bar	0 to 220 °C	109

DIMENSIONS

Model	NPS	L	D	D1	D2	b	f	z-d
CVFSA150-050	2"	203	150	120.7	92.1	16.3	2	4-19
CVFSA150-065	2 1/2"	216	180	139.7	104.8	17.9	2	4-19
CVFSA150-080	3"	241	190	152.4	127	19.5	2	4-19
CVFSA150-100	4"	292	230	190.5	157.2	24.3	2	8-19
CVFSA150-150	6"	356	280	241.3	215.9	25.9	2	8-22
CVFSA150-200	8"	495	345	298.5	269.9	29	2	8-22
CVFSA150-250	10"	622	405	362	323.8	30.6	2	12-26
CVFSA150-300	12"	699	485	431.8	381	32.2	2	12-26

All dimensions in millimetres unless shown otherwise. L face-to-face, D flange OD, D1 bolt circle, D2 raised face, b flange thickness, f raised face height, z-d number and diameter of bolt holes.

CONSTRUCTION DETAIL



No	Name	Material
1	Body	ASTM A351-CF8M
2	Seat	Integral material
3	Disc	ASTM A351-CF8M
4	Hinge	ASTM A351-CF8M
5	Hinge pin	ASTM A276-316
6	Support	ASTM A351-CF8M
7	Gasket	316 / graphite
8	Bonnet	ASTM A351-CF8M
9	Bonnet bolt	ASTM A193 Gr.B8
10	Bonnet bolt nut	ASTM A194 Gr.8

Sectional view — item numbers as tabled alongside.

Intended for industrial applications only — do not use where pressures or temperatures can exceed those listed above. System designers must consider the failure modes of all components and provide adequate safeguards against personal injury or equipment damage. Designs, materials and specifications are subject to change without notice due to our continuing program of product development.

CHECK VALVES · SWING PATTERN

CVFWA150 Flanged WCB Swing Check Valve

Full bore metal seated swing check valve with a cast carbon steel (WCB) body and silver primer coating. DN50 to DN300, ANSI 150 flanged, rated to 20 bar and 220 °C.

CARBON STEEL WCB | DN50 – DN300 | ANSI 150 · 20 BAR | METAL SEAT · FULL BORE



FEATURES

- 0 to 20 bar pressure rated
- Flanged carbon steel (WCB) body with silver primer coating
- Metal seat, full bore design
- Media temperature 0 to 220 °C
- Available in sizes DN50 to DN300
- ANSI 150 flange pattern
- Large flow rate and low head loss — full bore body with a recess for the disc to sit in when fully open

APPLICATIONS

- Liquid fuels
- Diesel
- Oils
- General industrial liquid service

STANDARDS

- Designed to BS 1868
- Flanges to ASME/ANSI B16.5
- Face to face to ASME B16.10
- Testing and inspection to API 598

OPERATIONAL SPECIFICATIONS

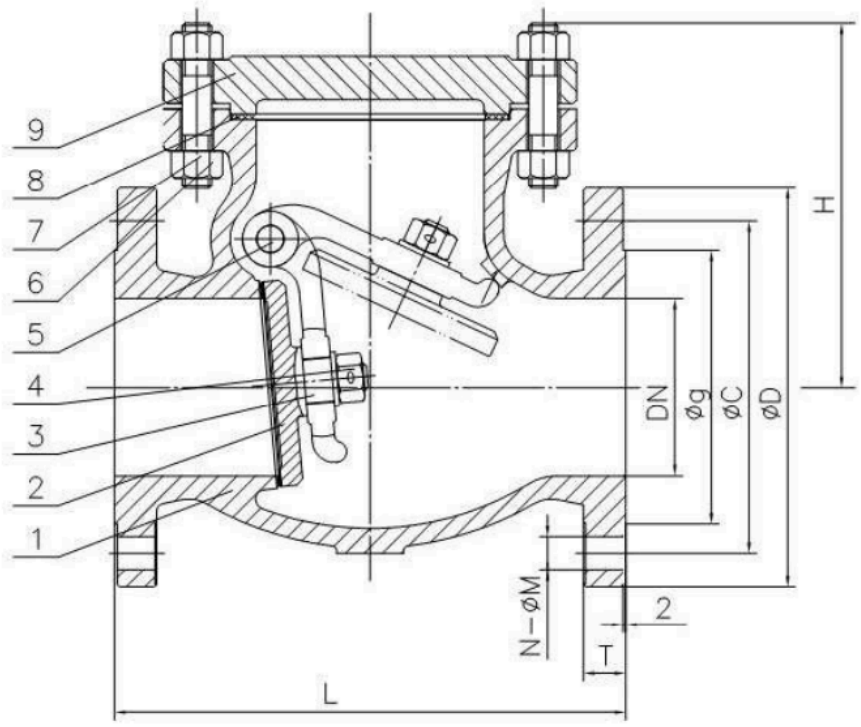
Model	DN (mm)	Pressure range	Media temperature
CVFWA150-050	50	0 to 20 bar	0 to 220 °C
CVFWA150-065	65	0 to 20 bar	0 to 220 °C
CVFWA150-080	80	0 to 20 bar	0 to 220 °C
CVFWA150-100	100	0 to 20 bar	0 to 220 °C
CVFWA150-125	125	0 to 20 bar	0 to 220 °C
CVFWA150-150	150	0 to 20 bar	0 to 220 °C
CVFWA150-200	200	0 to 20 bar	0 to 220 °C
CVFWA150-250	250	0 to 20 bar	0 to 220 °C

DIMENSIONS

Code	DN (mm)	Flange	D	C	G	T	L	H	N-M	Weight (kg)
CVFWA150-050	50	ANSI 150	152	120.5	92	15.9	203	155	4-19	12
CVFWA150-065	65	ANSI 150	178	139.5	105	17.5	216	165	4-19	15
CVFWA150-080	80	ANSI 150	190	152.5	127	19.1	241	185	4-19	21
CVFWA150-100	100	ANSI 150	229	190.5	157	23.9	292	196	8-19	36
CVFWA150-125	125	ANSI 150	254	216	186	23.9	330	202	8-22	47
CVFWA150-150	150	ANSI 150	279	241.5	216	25.4	356	225	8-22	61
CVFWA150-200	200	ANSI 150	343	298.5	270	28.6	495	263	8-22	109
CVFWA150-250	250	ANSI 150	406	362	324	30.2	622	285	12-25	200
CVFWA150-300	300	ANSI 150	483	432	381	31.8	698	320	12-25	270

All dimensions in millimetres unless shown otherwise. L face-to-face, D flange OD, C bolt circle, G raised face, T flange thickness, H overall height, N-M number and diameter of bolt holes.

CONSTRUCTION DETAIL



No	Item	Material
1	Body	WCB welding 13Cr
2	Disc	WCB welding 13Cr
3	Hinge	WCB
4	Nut	304 SS
5	Hinge pin	304 SS
6	Nut	304 SS
7	Stud	304 SS
8	Gasket	304 SS + graphite
9	Bonnet	WCB

Sectional view — item numbers as tabled alongside.

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

CHECK VALVES · SWING PATTERN

CVFWA300 ANSI 300 Flanged Cast Steel Swing Check Valve

Full bore metal seated cast carbon steel (WCB) swing check valve with a recess for the disc to sit in when fully open, giving a large flow rate and low head loss. DN50 to DN300, ANSI 300 raised face flanges, 50 bar at ambient.

CARBON STEEL WCB | DN50 – DN300 | ANSI 300 · 50 BAR | METAL SEAT · FULL BORE



FEATURES

- Sizes 50 mm to 300 mm
- Cast carbon steel (WCB) body
- Metal seat, full bore design
- 50 bar rated at ambient temperature
- Media temperature to 315 °C at 38 bar
- Recessed disc pocket for low head loss and pressure drop when fully open
- ANSI 300 raised face flange pattern

APPLICATIONS

- Liquid fuels and diesel
- Oils
- High temperature liquid service
- General industrial liquid service

STANDARDS

- Designed to API 594
- RF flanges to ASME B16.5
- Face to face to ASME B16.10
- Testing and inspection to API 598

OPERATIONAL SPECIFICATIONS

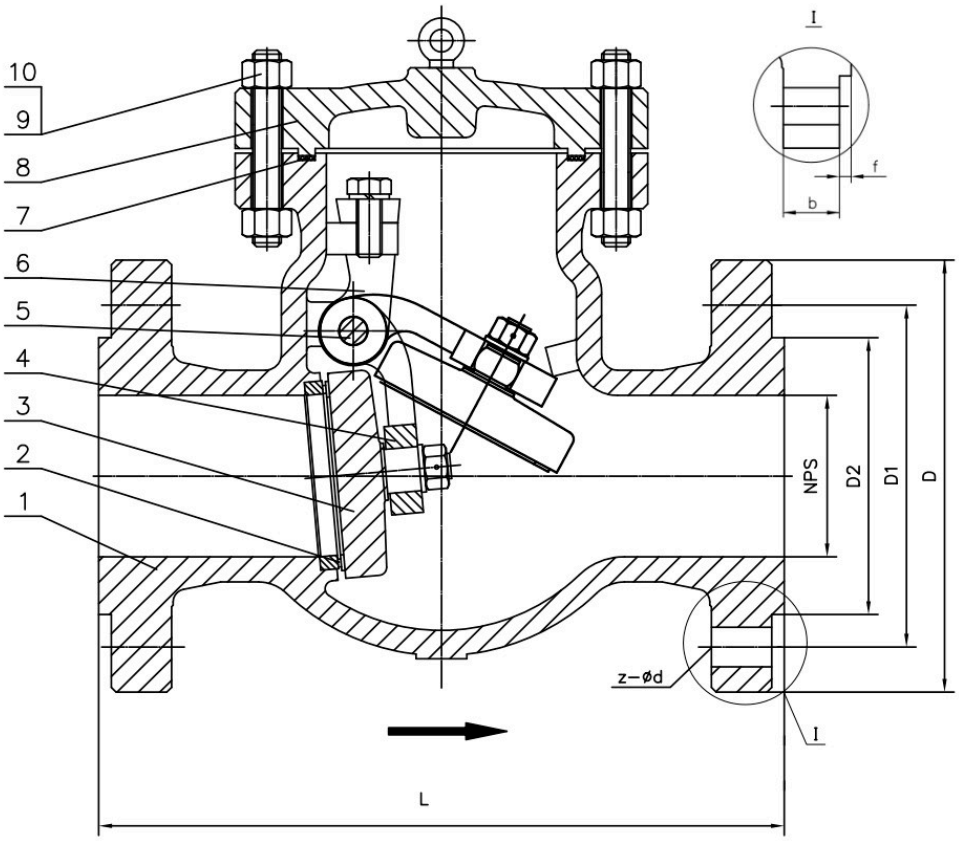
Model	DN (mm)	Pressure range (ambient)	Media temperature	Weight (kg)
CVFWA300-050	50	0 to 50 bar	315 °C at 38 bar	16
CVFWA300-065	65	0 to 50 bar	315 °C at 38 bar	23
CVFWA300-080	80	0 to 50 bar	315 °C at 38 bar	29
CVFWA300-100	100	0 to 50 bar	315 °C at 38 bar	46
CVFWA300-150	150	0 to 50 bar	315 °C at 38 bar	82
CVFWA300-200	200	0 to 50 bar	315 °C at 38 bar	136

DIMENSIONS

Model	NPS	L	D	D1	D2	b	f	z-ød
CVFWA300-050	2"	267	165	127	92.1	20.7	2	8-19
CVFWA300-065	2-1/2"	292	190	149.2	104.8	23.9	2	8-22
CVFWA300-080	3"	318	210	168.3	127	27	2	8-22
CVFWA300-100	4"	356	255	200	157.2	30.2	2	8-22
CVFWA300-150	6"	445	320	269.9	215.9	35	2	12-22
CVFWA300-200	8"	533	380	330.2	269.9	39.7	2	12-26
CVFWA300-250	10"	622	445	387.4	323.8	46.1	2	16-29
CVFWA300-300	12"	711	520	450.8	381	49.3	2	16-32

All dimensions in millimetres unless specified. L face-to-face, D flange OD, D1 bolt circle, D2 raised face, b flange thickness, f raised face height, z-ød number and diameter of bolt holes.

CONSTRUCTION DETAIL



No	Part name	Material
1	Body	ASTM A216-WCB
2	Seat	ASTM A105 deposited 13
3	Disc	ASTM A216-WCB deposited
4	Hinge	ASTM A216-WCB
5	Hinge pin	ASTM A276-420
6	Support	ASTM A216-WCB
7	Gasket	Flexible graphite / 304
8	Bonnet	ASTM A216-WCB
9	Bonnet bolt	ASTM A193 Gr.B7
10	Bonnet bolt nut	ASTM A194 Gr.2H

Sectional view — item numbers as tabled alongside; arrow indicates flow direction.

Intended for industrial applications only — do not use where pressures or temperatures can exceed those listed above. System designers must consider the failure modes of all components and provide adequate safeguards against personal injury or equipment damage. Designs, materials and specifications are subject to change without notice due to our continuing program of product development.

Ball Valves

BALL VALVES · STAINLESS STEEL

BVS2P Two Piece Stainless Steel Lockable Ball Valve

Investment cast CF8M two piece ball valve with 316 ball and stem, PTFE seats and a lockable lever handle. Full bore, BSPT threaded, DN10 to DN100.

CF8M · 316 | DN10 – DN100 | PN63 / 1000 PSI | WaterMark



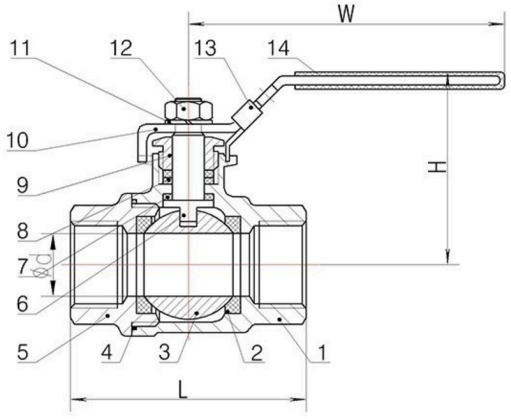
FEATURES

- Two piece stainless steel construction
- For potable water applications
- Threaded BSPT ends · full bore
- Lockable lever handle
- Blowout-proof stem
- Investment cast body
- Pressure rating 1000 PSI (PN63) · WOG 1000
- Working temperature −20 °C to 200 °C
- WaterMark certified

MATERIALS

No	Part	Material
1	Body	CF8M
2	Seat	PTFE
3	Ball	316
4	Gasket	PTFE
5	Cap	CF8M
6	Stem	316
7	Thrust washer	PTFE
8	Packing	PTFE
9	Gland nut	304
10	Handle	304
11	Spring washer	304
12	Nut	304
13	Lock	304
14	Handle cover	Plastic

DIMENSIONS



Sectional arrangement — L face-to-face, H stem height, W handle length; item numbers as tabled above.

Code	DN (mm)	Size	L (mm)	H (mm)	W (mm)	Torque (Nm)	Weight (kg)
BVS2P010	10	3/8″	50	49	106	4	0.19
BVS2P015	15	1/2″	56	51	106	5	0.26
BVS2P020	20	3/4″	66	58	116	8	0.41
BVS2P025	25	1″	79	73	148	10	0.66
BVS2P032	32	1 1/4″	91	79	148	14	1.00
BVS2P040	40	1 1/2″	99	85	182	25	1.30
BVS2P050	50	2″	121	95	182	40	2.10
BVS2P065	65	2 1/2″	147	126	252	48	3.83
BVS2P080	80	3″	173	138	252	80	5.74
BVS2P100	100	4″	222	158	283	103	10.7

BALL VALVES · STAINLESS STEEL

BVS3P Three Piece Stainless Steel Lockable Ball Valve

Investment cast CF8M three piece swing-out ball valve with 316 ball and stem, PTFE seats and a lockable lever handle. Full bore, BSPT threaded, DN10 to DN100.



CF8M · 316 | DN10 – DN100 | PN63 / 1000 PSI | SWING-OUT BODY

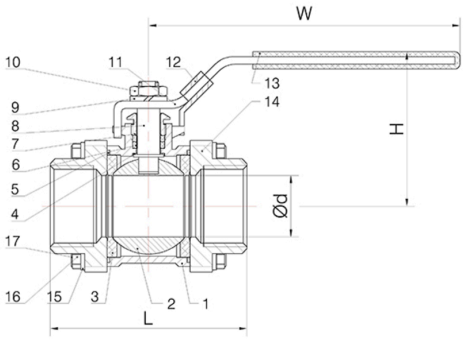
FEATURES

- Three piece stainless steel construction with swing-out design
- For potable water, mining, industrial and chemical applications
- Threaded BSPT ends · full bore
- Lockable lever handle
- Blowout-proof stem
- Investment cast body
- Pressure rating 1000 PSI (PN63) · WOG 1000
- Working temperature −20 °C to 200 °C
- WaterMark certified

MATERIALS

No	Part	Material
1	Body	CF8M
2	Ball	316
3	Seat	PTFE
4	Thrust washer	PTFE
5	Gasket	PTFE
6	Packing	PTFE
7	Gland nut	304
8	Stem	316
9	Spring washer	304
10	Nut	304
11	Handle	304
12	Lock	304
13	Handle cover	Plastic
14	Cap	CF8M
15	Spring washer	316
16	Nut	304
17	Bolt	316

DIMENSIONS



Code	DN (mm)	Size	L (mm)	H (mm)	W (mm)	Torque (Nm)	Weight (kg)
BVS3P010	10	3/8″	51	44.5	103	5	0.29
BVS3P015	15	1/2″	63	50	103	6	0.43
BVS3P020	20	3/4″	71	59	127	10	0.61
BVS3P025	25	1″	80	61	127	12	0.80
BVS3P032	32	1 1/4″	94	79	154	17	1.43
BVS3P040	40	1 1/2″	103	83	154	30	1.73
BVS3P050	50	2″	126	94	195	48	2.72
BVS3P065	65	2 1/2″	158	135	244	58	5.44
BVS3P080	80	3″	179	144	244	96	7.64
BVS3P100	100	4″	213	149	285	124	15.78

Sectional arrangement — L face-to-face, H stem height, W handle length; item numbers as tabled above.

All dimensions in millimetres. Torque values are nominal breakaway figures for actuator sizing.

BALL VALVES · THREE WAY

BVS3WL Three Way L Port Stainless Steel Ball Valve

Reduced bore three way L port ball valve in CF8M with 316 ball and stem, reinforced PTFE seats, lockable lever handle and an ISO 5211 direct mounting pad. DN8 to DN100.

CF8M · 316 | DN8 – DN100 | PN63 / 1000 PSI | ISO 5211 PAD



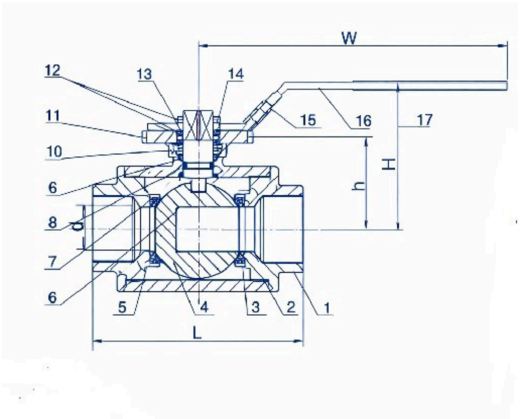
FEATURES

- High-performance 3-way L port ball valve
- Reduced bore design
- Lockable lever handle
- BSP threaded connections to ISO 7.1 sealing standards
- Self-adjusting stem packing assembly
- Belleville spring compensates for temperature fluctuation and vibration
- ISO 5211 direct mounting pad with pre-drilled metric holes
- CF8M / 316 stainless steel construction
- Reinforced PTFE seats
- Pressure rating 63 bar (1000 PSI)
- Working temperature −20 °C to 180 °C
- WaterMark certified
- Suitable for water treatment, chemical, marine, petrochemical and general industrial service

MATERIALS

No	Part	Material
1	Cap	CF8M
2	Gasket	PTFE
3	Ball seat	15% RPTFE
4	Ball	316 stainless
5	Body	CF8M
6	Stem	316 stainless
7	Thrust washer	PTFE
8	O-ring	Viton
9	Stem packing	PTFE
10	Stem ring	316 stainless
11	Belleville washer	304 stainless
12	Nut	304 stainless
13	Plate washer	304 stainless
14	Nut stopper	304 stainless
15	Locking device	304 stainless
16	Handle	304 stainless
17	Handle cover	Plastic
18	Stop pin	304 stainless

CONSTRUCTION DETAIL



DIMENSION DETAIL

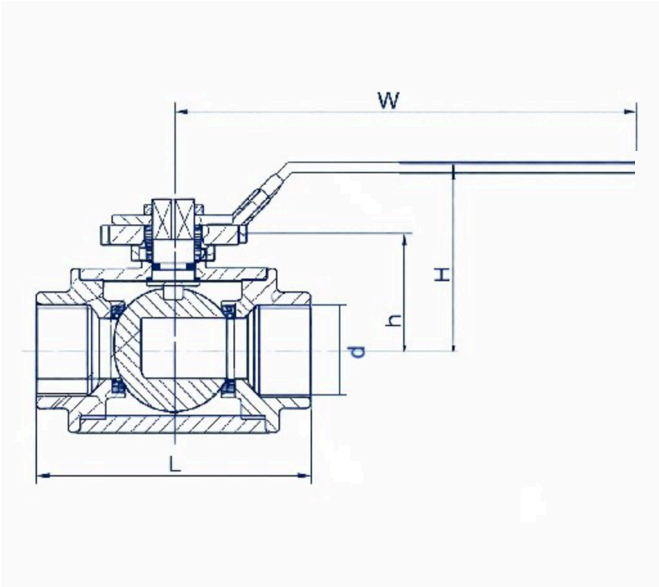


Fig. 2 — L face-to-face, H stem height, h pad height, W handle length, d bore.

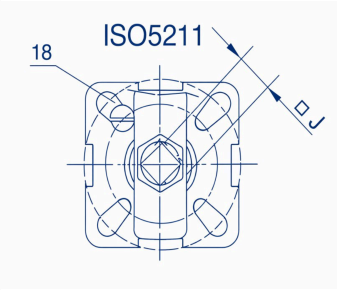


Fig. 3 — ISO 5211 mounting pad, ØJ bolt circle.

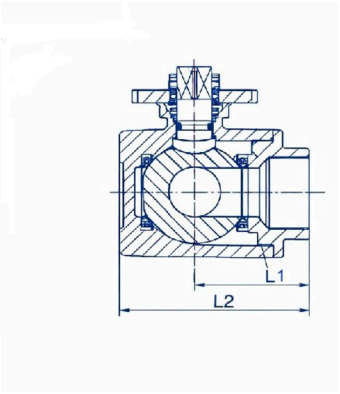
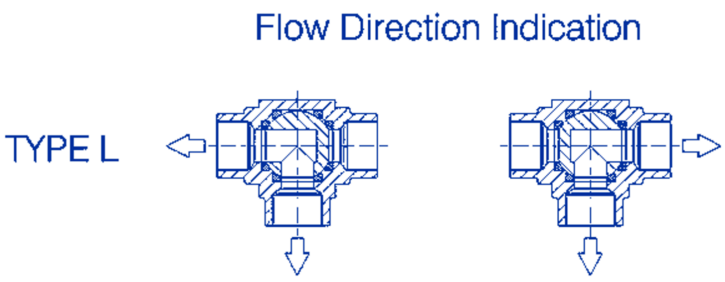


Fig. 4 — Branch port section, L1 and L2 centres.

DN (mm)	Size	d	L	H	W	Mounting flange	h	L1	L2	J	Weight (kg)
8	1/4″	9.5	75	66	130	F03 / F04	36.8	37.5	57.5	9	0.70
10	3/8″	11	75	66	130	F03 / F04	36.8	37.5	57.5	9	0.67
15	1/2″	12	75	66	130	F03 / F04	36.8	37.5	57.5	9	0.63
20	3/4″	15	85	72	161	F04 / F05	41.2	42.5	65.5	11	0.94
25	1″	20	100	77	161	F04 / F05	46.5	50	79	11	1.39
32	1 1/4″	25	122	92	203	F05 / F07	56	61	97	14	2.91
40	1 1/2″	32	131	96	203	F05 / F07	60	65.5	106.5	14	3.66
50	2″	40	158	107	203	F05 / F07	70.5	79	129	14	6.31
65	2 1/2″	49	178	135	254	F07 / F10	95.5	89	145	17	8.95
80	3″	60	202	147	254	F07 / F10	106	101	167	17	13.11
100	4″	75	246	160	310	F07 / F10	119	123	203	17	22.10

All dimensions in millimetres unless stated.

FLOW DIRECTION



Type L ball — handle positions and the resulting flow paths.

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions

BALL VALVES · THREE WAY

BVS3WT Three Way T Port Stainless Steel Ball Valve

Reduced bore three way T port ball valve in CF8M with 316 ball and stem, reinforced PTFE seats, lockable lever handle and an ISO 5211 direct mounting pad. DN8 to DN100.

CF8M · 316 | DN8 – DN100 | PN63 / 1000 PSI | ISO 5211 PAD



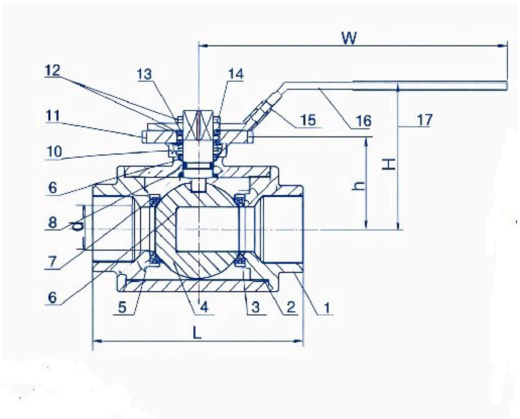
FEATURES

- High-performance 3-way T port ball valve
- Reduced bore design
- Lockable lever handle
- BSP threaded connections to ISO 7.1 sealing standards
- Self-adjusting stem packing assembly
- Belleville spring compensates for temperature fluctuation and vibration
- ISO 5211 direct mounting pad with pre-drilled metric holes
- CF8M / 316 stainless steel construction
- Reinforced PTFE seats
- Pressure rating 63 bar (1000 PSI)
- Working temperature −20 °C to 180 °C
- WaterMark certified
- Suitable for water treatment, chemical, marine, petrochemical and general industrial service

MATERIALS

No	Part	Material
1	Cap	CF8M
2	Gasket	PTFE
3	Ball seat	15% RPTFE
4	Ball	316 stainless
5	Body	CF8M
6	Stem	316 stainless
7	Thrust washer	PTFE
8	O-ring	Viton
9	Stem packing	PTFE
10	Stem ring	316 stainless
11	Belleville washer	304 stainless
12	Nut	304 stainless
13	Plate washer	304 stainless
14	Nut stopper	304 stainless
15	Locking device	304 stainless
16	Handle	304 stainless
17	Handle cover	Plastic
18	Stop pin	304 stainless

CONSTRUCTION DETAIL



DIMENSION DETAIL

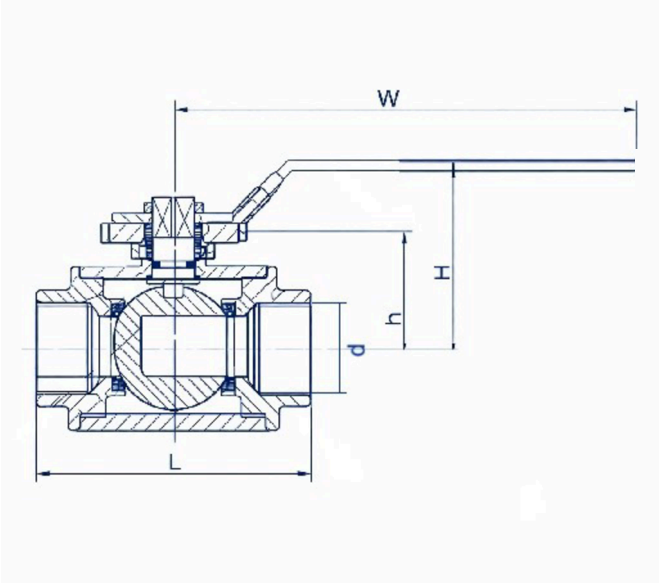


Fig. 2 — L face-to-face, H stem height, h pad height, W handle length, d bore.

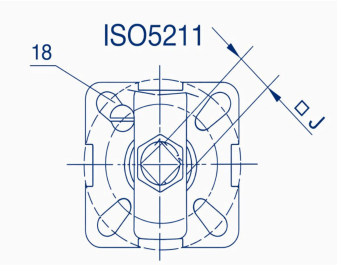


Fig. 3 — ISO 5211 mounting pad, ØJ bolt circle.

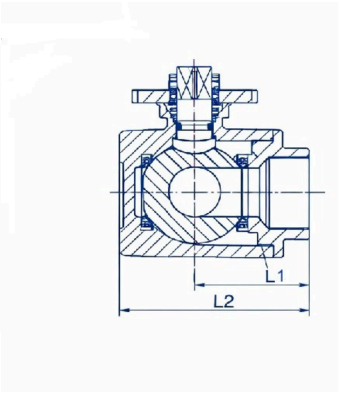
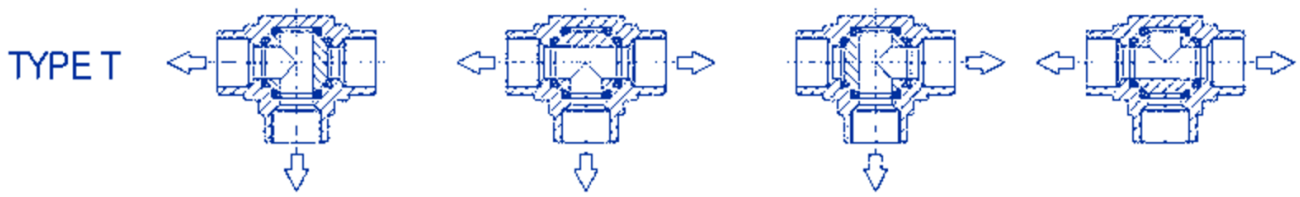


Fig. 4 — Branch port section, L1 and L2 centres.

DN (mm)	Size	d	L	H	W	Mounting flange	h	L1	L2	J	Weight (kg)
8	1/4″	9.5	75	66	130	F03 / F04	36.8	37.5	57.5	9	0.70
10	3/8″	11	75	66	130	F03 / F04	36.8	37.5	57.5	9	0.67
15	1/2″	12	75	66	130	F03 / F04	36.8	37.5	57.5	9	0.63
20	3/4″	15	85	72	161	F04 / F05	41.2	42.5	65.5	11	0.94
25	1″	20	100	77	161	F04 / F05	46.5	50	79	11	1.39
32	1 1/4″	25	122	92	203	F05 / F07	56	61	97	14	2.91
40	1 1/2″	32	131	96	203	F05 / F07	60	65.5	106.5	14	3.66
50	2″	40	158	107	203	F05 / F07	70.5	79	129	14	6.31
65	2 1/2″	49	178	135	254	F07 / F10	95.5	89	145	17	8.95
80	3″	60	202	147	254	F07 / F10	106	101	167	17	13.11
100	4″	75	246	160	310	F07 / F10	119	123	203	17	22.10

All dimensions in millimetres unless stated.

FLOW DIRECTION



Type T ball — four handle positions and the resulting flow paths.

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

Knife Gate Valves

KNIFE GATE VALVES · STAINLESS STEEL

KGVSM Stainless Steel Metal Seat Knife Gate Valve

Uni-directional lugged knife gate valve in CF8M with a 316 knife, integral metal seat and PTFE gland packing. Rising stem with malleable iron hand wheel. DN50 to DN350.

CF8M · 316 | DN50 – DN350 | PN10 / 10 BAR | UNI-DIRECTIONAL | METAL SEAT

FEATURES

- Stainless steel construction
- For potable water, waste water and slurry applications
- Lugged flange body
- Uni-directional
- Metal seat — not bubble tight
- Pressure rating 10 bar
- Working temperature −29 °C to 150 °C

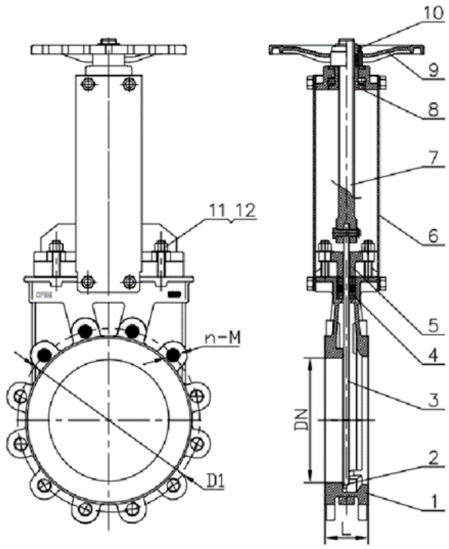
STANDARDS & TESTING

- Design and manufacture to MSS SP-81
- Face to face to MSS SP-81
- Flange dimensions to AS 2129
- Test and inspect to MSS SP-81
- Shell test 1.5 MPa

MATERIALS

No	Part	Material
1	Body	CF8M
2	Seat	Metal
3	Knife	316
4	Packing	PTFE
5	Gland	CF8M
6	Yoke	316
7	Stem	316
8	Stem nut	Brass
9	Hand wheel	Malleable iron
10	Lock nut	Carbon steel
11	Gland bolt	A193 B8
12	Nut	A194 8

DIMENSIONS



Face and sectional views — L face-to-face, D1 flange OD, n-M bolt holes; item numbers as tabled above.

Code	DN (mm)	Size	L (mm)	D1 (mm)	n-M	Flange pattern
KGVSM050-D/E	50	2″	48	114	4-M16	Table D/E
KGVSM080-D/E	80	3″	51	146	4-M16	Table D/E
KGVSM100-D	100	4″	51	178	4-M16	Table D
KGVSM100-E	100	4″	51	178	8-M16	Table E
KGVSM125-D/E	125	5″	57	210	8-M16	Table D/E
KGVSM150-D	150	6″	57	235	8-M16	Table D
KGVSM150-E	150	6″	57	235	8-M20	Table E
KGVSM200-D	200	8″	70	292	8-M16	Table D
KGVSM200-E	200	8″	70	292	8-M20	Table E
KGVSM250-D	250	10″	70	356	8-M20	Table D
KGVSM250-E	250	10″	70	356	12-M20	Table E
KGVSM300-D	300	12″	76	406	12-M20	Table D
KGVSM300-E	300	12″	76	406	12-M24	Table E
KGVSM350-D/E	350	14″	76	470	12-M24	Table D/E

All dimensions in millimetres. Flange drilling to AS 2129 Table D or Table E as coded.

KNIFE GATE VALVES · STAINLESS STEEL

KGVRSN Stainless Steel Resilient Seat Knife Gate Valve

Uni-directional lugged knife gate valve in CF8M with a 316 knife, NBR resilient seat and PTFE gland packing. Rising stem with malleable iron hand wheel. DN50 to DN350.

CF8M · 316 | DN50 – DN350 | PN10 / 10 BAR | UNI-DIRECTIONAL | NBR SOFT SEAT

FEATURES

- Stainless steel construction
- For potable water, waste water and slurry applications
- Lugged flange body
- Uni-directional
- NBR soft seat — bubble tight shut off
- Pressure rating 10 bar
- Working temperature −29 °C to 80 °C

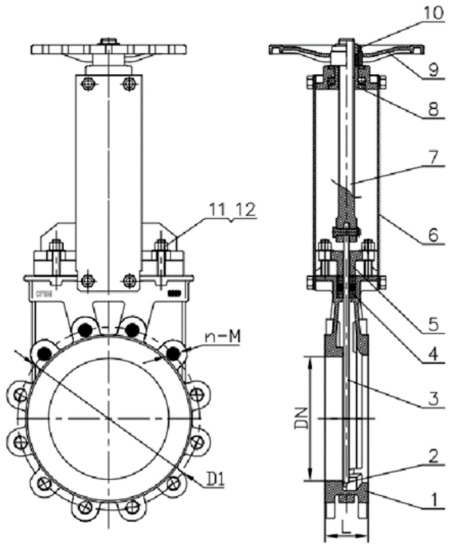
STANDARDS & TESTING

- Design and manufacture to MSS SP-81
- Face to face to MSS SP-81
- Flange dimensions to AS 2129
- Test and inspect to MSS SP-81
- Shell test 1.5 MPa
- Closure test 1.1 MPa

MATERIALS

No	Part	Material
1	Body	CF8M
2	Seat	NBR
3	Knife	316
4	Packing	PTFE
5	Gland	CF8M
6	Yoke	316
7	Stem	316
8	Stem nut	Brass
9	Hand wheel	Malleable iron
10	Lock nut	Carbon steel
11	Gland bolt	A193 B8
12	Nut	A194 8

DIMENSIONS



Face and sectional views — L face-to-face, D1 flange OD, n-M bolt holes; item numbers as tabled above.

Code	DN (mm)	Size	L (mm)	D1 (mm)	n-M	Flange pattern
KGVSRN050-D/E	50	2″	48	114	4-M16	Table D/E
KGVSRN080-D/E	80	3″	51	146	4-M16	Table D/E
KGVSRN100-D	100	4″	51	178	4-M16	Table D
KGVSRN100-E	100	4″	51	178	8-M16	Table E
KGVSRN125-D/E	125	5″	57	210	8-M16	Table D/E
KGVSRN150-D	150	6″	57	235	8-M16	Table D
KGVSRN150-E	150	6″	57	235	8-M20	Table E
KGVSRN200-D	200	8″	70	292	8-M16	Table D
KGVSRN200-E	200	8″	70	292	8-M20	Table E
KGVSRN250-D	250	10″	70	356	8-M20	Table D
KGVSRN250-E	250	10″	70	356	12-M20	Table E
KGVSRN300-D	300	12″	76	406	12-M20	Table D
KGVSRN300-E	300	12″	76	406	12-M24	Table E
KGVSRN350-D/E	350	14″	76	470	12-M24	Table D/E

All dimensions in millimetres. Flange drilling to AS 2129 Table D or Table E as coded.

KNIFE GATE VALVES · STAINLESS STEEL

KGV-B-SS Bi-Directional Resilient Seat Knife Gate Valve

Bi-directional lugged knife gate valve in CF8M with a 316 knife, NBR resilient seat and PTFE + NBR gland packing. Ball bearing rising stem with position indicator. DN50 to DN600, Table E drilling.

CF8M · 316 | DN50 – DN600 | PN10 / 10 BAR | BI-DIRECTIONAL | TABLE E



FEATURES

- Stainless steel construction
- For potable water, waste water and slurry applications
- Lugged flange body
- Bi-directional — full pressure both directions
- NBR soft seat — bubble tight shut off
- Rising stem with position indicator and support plate
- Ball bearing stem nut for reduced operating effort
- Pressure rating 10 bar
- Working temperature −29 °C to 80 °C

STANDARDS & TESTING

- Design and manufacture to MSS SP-81
- Face to face to MSS SP-81
- Flange dimensions to AS 2129 Table E
- Test and inspect to MSS SP-81
- Shell test 1.5 MPa
- Closure test 1.1 MPa

MATERIALS

No	Part	Material
1	Body	CF8M
2	Seat	NBR
3	Knife	316 stainless
4	Packing	PTFE + NBR
5	Gland	CF8M
6	Nut and bolt	316 stainless
7	Position indicator	316 stainless
8	Support plate	316 stainless
9	Stem	316 stainless
10	Stem nut	Brass
11	Nut support	GGG40 + epoxy coatin
12	Ball bearing	Steel
13	Hand wheel	Malleable cast iron
14	Union cap	Malleable cast iron

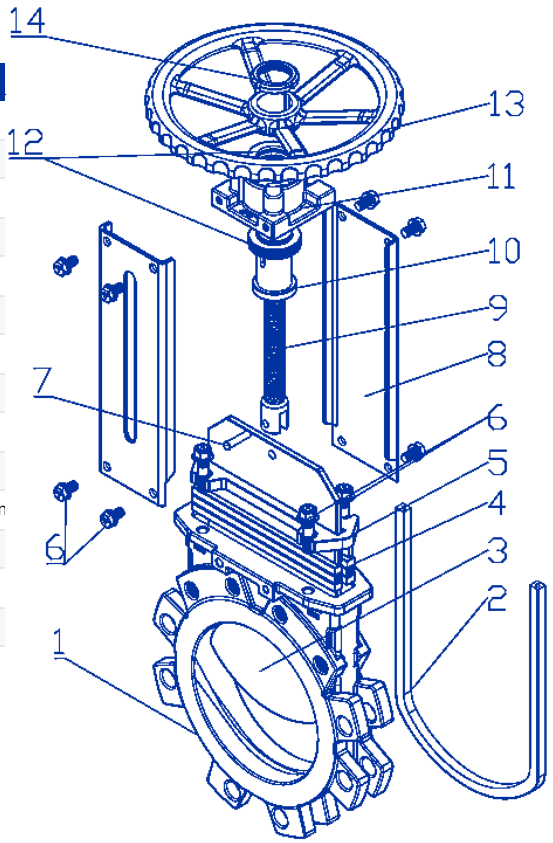


Fig. 1 — Exploded assembly, item numbers as tabled alongside.

MODEL CODE

KGV – 050 – B – SS – NBR – E – HW

DIMENSIONS

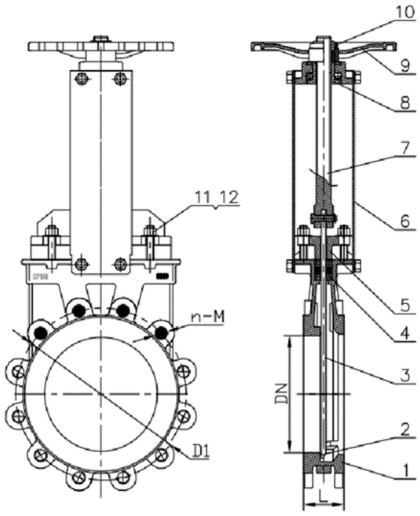


Fig. 2 — Face and sectional views: L face-to-face, D1 flange OD, n-M bolt holes.

Code	DN (mm)	Size	L (mm)	D1 (mm)	n-M	H1 (mm)	H (mm)	Weight (kg)
KGV050-B-SS-NBR-E-HW	50	2″	48	114	4-M16	60	280	7
KGV065-B-SS-NBR-E-HW	65	2 1/2″	51	127	4-M16	70	300	8
KGV080-B-SS-NBR-E-HW	80	3″	51	146	4-M16	95	350	10
KGV100-B-SS-NBR-E-HW	100	4″	51	165	4-M16	105	390	12
KGV125-B-SS-NBR-E-HW	125	5″	57	210	8-M16	120	420	15
KGV150-B-SS-NBR-E-HW	150	6″	57	235	8-M16	140	480	22
KGV200-B-SS-NBR-E-HW	200	8″	70	292	8-M16	160	600	32
KGV250-B-SS-NBR-E-HW	250	10″	70	356	8-M20	190	690	48
KGV300-B-SS-NBR-E-HW	300	12″	76	406	12-M20	232	780	62
KGV350-B-SS-NBR-E-HW	350	14″	76	470	12-M24	265	900	76
KGV400-B-SS-NBR-E-HW	400	16″	89	521	12-M24	290	1000	118
KGV450-B-SS-NBR-E-HW	450	18″	89	584	16-M24	315	1150	150
KGV500-B-SS-NBR-E-HW	500	20″	114	641	16-M24	340	1250	188
KGV600-B-SS-NBR-E-HW	600	24″	114	756	12-M30	415	1340	235

All dimensions in millimetres. H is overall height with the gate fully open; H1 is the body height to the top of the lugged flange. Flange drilling to AS 2129 Table E.

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

Actuators

ACTUATION · PNEUMATIC

APDA Pneumatic Actuator — Double Acting

Rack and pinion quarter-turn double acting air actuator with NAMUR pneumatic and accessory interfaces and ISO 5211 bottom mount. Cylinder Ø32–Ø400, 12–13,024 Nm.

NAMUR | ISO 5211 | RACK & PINION | 2.5–8 BAR



FEATURES

- Double acting air actuator
- Rack and pinion quarter turn design
- End of stroke adjustment
- Air supply connection to NAMUR standard for solenoid valves and speed controllers
- ISO 5211 bottom mount for direct installation onto valves, declutchable gearboxes or mounting kits
- Position indicator with NAMUR interface for limit switch boxes and positioners
- Two independent externally mounted travel stops, ±5° adjustment at open or closed
- Operating direction is reversible
- Fasteners: 316 stainless steel

TECHNICAL SPECIFICATION

Body	**Extruded aluminium alloy**
End caps	**Cast aluminium, epoxy coated**
Cylinder size	**32 mm – 400 mm**
Control pressure	**2.5 – 8 bar**
Control medium	**Dry or lubricated air, non-corrosive gases Max particle diameter 30 µm**
Ambient temperature	**Standard −20 °C to +80 °C Low temp option −40 °C to +80 °C High temp option −20 °C to +150 °C**
Coatings	**Hard anodise, epoxy, PTFE or nickel plated**
Mounting pad	**ISO 5211**
Application	**Indoor or outdoor use**

OPTIONS

LIMIT SWITCHES

Mechanical switches · proximity sensors · explosion proof

NAMUR SOLENOIDS

12 V DC, 24 V DC · 24 V AC, 110 V AC, 240 V AC

ACCESSORIES

Viton seals for −20 °C to 150 °C · filter regulators · positioners · extensions · repair seal kits

DIMENSIONAL SPECIFICATIONS

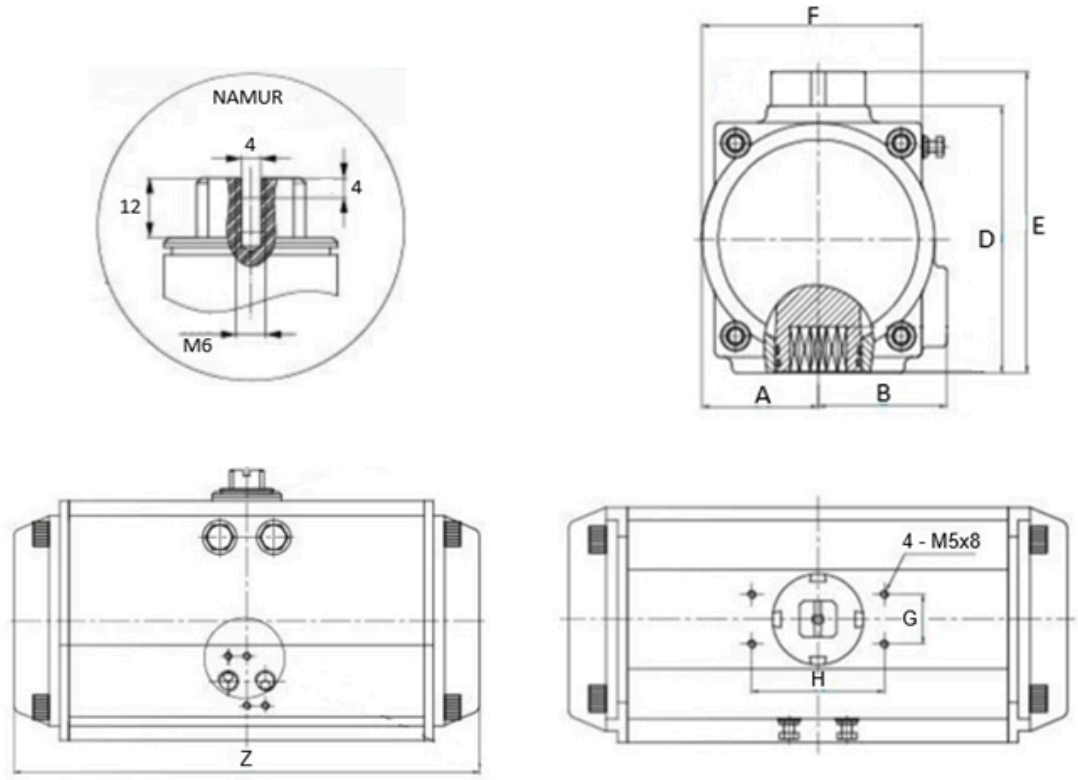


Fig. 1 — NAMUR accessory pad, end view (A, B, D, E, F), plan views (G, H, Z) and mounting threads.

Model	Cylinder Ø	A	B	D	E	F	G	H	Z	Weight (kg)
APRT007DA	32	—	—	45	65	51	30	80	116	0.7
APRT012DA	40	28.5	36.5	60	80	52	30	80	122	1
APRT020DA	52	30	41.5	72	92	65	30	80	149	1.35
APRT035DA	63	36	47	88	108	72	30	80	168	1.95
APRT050DA	75	42	53	99.5	119.5	81	30	80	184	2.56
APRT075DA	83	46	57	109	129	92	30	80	210	3.28
APRT110DA	92	50	58.5	116.5	136.5	98	30	80	262	4.58
APRT160DA	105	57.5	64	133	153	109.5	30	80	268	5.89
APRT255DA	125	67.5	74.5	155	175	127.5	30	80	301	8.94
APRT435DA	140	75	77	172	192	137.5	30	80	394	13.43
APRT665DA	160	87	87	197	217	158	30	80	458	19.96
APRT1000DA	190	103	103	230	260	189	30	130	528	34.99
APRT1200DA	210	113	113	255	285	210	30	130	536	46.77
APRT1800DA	240	130	130	289	319	245	30	130	606	54.16
APRT2700DA	270	147	147	328	358	273	30	130	726	77.17
APRT3800DA	300	203	203	348	378	290	30	130	760	106.53
APRT5700DA	350	230	230	408	438	336	30	130	888	160.07
APRT8000DA	400	258	258	480	510	360	30	130	930	181.94

All dimensions in millimetres unless stated.

MOUNTING & SHAFT INTERFACE

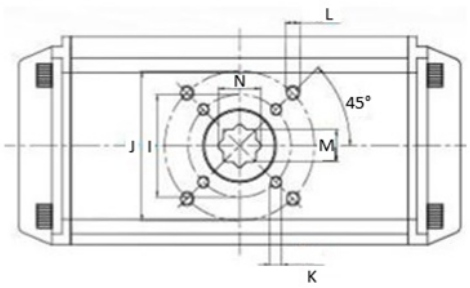


Fig. 2 — Bottom mount flange (I, J, K, L, M, N).

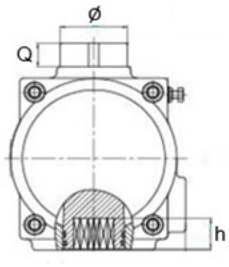


Fig. 3 — Drive interface.

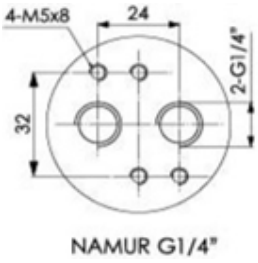


Fig. 4 — NAMUR G1/4″, 4 – M5×8.

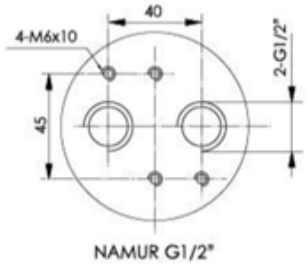


Fig. 5 — NAMUR G1/2″, 4 – M6×10.

ISO 5211 FLANGE SPECIFICATIONS

Flange	OD	PCD	Bolt qty	Bolt size	Thread depth
F03	46	36	4	M5	8
F04	54	42	4	M5	8
F05	65	50	4	M6	10
F07	90	70	4	M8	13
F10	125	102	4	M10	16
F12	150	125	4	M12	20
F14	175	140	4	M16	25
F16	210	165	4	M20	25
F25	300	254	8	M16	25

MOUNTING FLANGE, SHAFT AND AIR SUPPLY BY MODEL

	ISO 5211 flange							
Model	I	J	M	N	Ø Q	h	Ø	Air supply
APRT007DA	F03	—	9	12	—	11	40	NAMUR 1/8″
APRT012DA	F03	F05	11	12	—	14	40	NAMUR 1/4″
APRT020DA	F03	F05	11	15.5	20	14	40	NAMUR 1/4″
APRT035DA	F05	F07	14	19.7	20	18	40	NAMUR 1/4″
APRT050DA	F05	F07	14	19.7	20	18	40	NAMUR 1/4″
APRT075DA	F05	F07	17	24	20	21	40	NAMUR 1/4″
APRT110DA	F05	F07	17	24	20	31	40	NAMUR 1/4″
APRT160DA	F07	F10	22	31	20	26	40	NAMUR 1/4″
APRT255DA	F07	F10	22	29.5	20	37	55	NAMUR 1/4″
APRT435DA	F10	F12	27	36.7	20	37	55	NAMUR 1/4″
APRT665DA	F10	F12	27	36.7	20	37	55	NAMUR 1/4″
APRT1000DA	F14	—	36	49.5	30	47	80	NAMUR 1/4″
APRT1200DA	F14	—	36	49.5	30	47	80	NAMUR 1/4″
APRT1800DA	F14	—	46	63.6	30	53	80	NAMUR 1/4″
APRT2700DA	F16	—	46	63.6	30	66	80	NAMUR 1/4″
APRT3800DA	F16	—	Ø50.6	59.2	30	72	80	NAMUR 1/2″
APRT5700DA	F16	F25 *	55	63.6	30	72	80	NAMUR 1/2″
APRT8000DA	F16	F25 *	55	77.7	30	72	80	NAMUR 1/2″

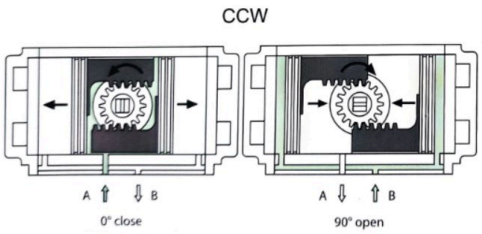
* denotes output shaft can be custom configured.

TORQUE OUTPUT & AIR CONSUMPTION

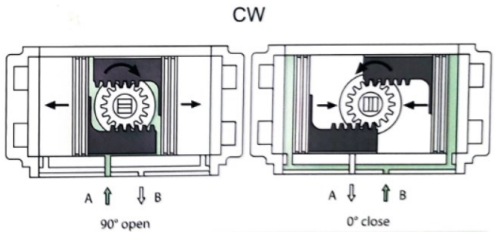
	Air pressure (bar) — output torque (Nm)							Air consumption (litres)	
Model	2	3	4	5	6	7	8	Opening	Closing
APRT007DA	3	5	6	8	9	11	12	0.04	0.05
APRT012DA	5	7	10	12	14	17	19	0.08	0.11
APRT020DA	8	12	16	20	24	28	32	0.12	0.16
APRT035DA	15	22	29	36	44	51	58	0.21	0.23
APRT050DA	20	30	40	50	60	70	80	0.3	0.34
APRT075DA	31	47	63	78	94	110	125	0.43	0.47
APRT110DA	45	68	90	113	135	158	181	0.64	0.73
APRT160DA	66	99	132	165	198	231	264	0.95	0.88
APRT255DA	100	150	200	251	301	351	401	1.6	1.4
APRT435DA	171	256	342	427	513	598	684	2.5	2.2
APRT665DA	266	399	532	665	798	931	1064	3.7	3.2
APRT1000DA	426	638	851	1064	1277	1490	1702	5.9	5.4
APRT1200DA	532	798	1064	1330	1596	1862	2128	7.5	7.5
APRT1800DA	769	1154	1539	1924	2308	2693	3078	11	9
APRT2700DA	1170	1754	2339	2924	3509	4094	4679	17	14
APRT3800DA	1526	2289	3052	3815	4578	5341	6104	23.8	29.7
APRT5700DA	2285	3427	4570	5712	6854	7997	9139	35.1	46.3
APRT8000DA	3256	4884	6512	8140	9768	11396	13024	52.6	56

Air volume and cycle time: L/min = air volume (opening + closing consumption) × 101.3 × actuator cycles per minute ÷ (air supply kPa + 101.3).

OPERATING PRINCIPLES



Air to port A drives the pistons outwards and the shaft counter clockwise, exhausting port B. Air to port B drives the pistons inwards and the shaft clockwise.



Reversed assembly: air to port A drives the shaft clockwise, air to port B counter clockwise. Operating direction is reversible on site.

STANDARDS & COMPLIANCE

- Air supply interface to NAMUR standard
- Accessory interface to NAMUR (VDI/VDE 3845)
- Bottom mounting flange according to ISO 5211
- Fasteners in 316 stainless steel

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

ACTUATION · PNEUMATIC

APSA Pneumatic Actuator — Single Acting Spring Return

Rack and pinion quarter-turn single acting spring return air actuator with NAMUR pneumatic and accessory interfaces and ISO 5211 bottom mount. Cylinder Ø52–Ø400, 5–9,523 Nm air stroke.



NAMUR | ISO 5211 | SPRING RETURN | 2.5–8 BAR

FEATURES

- Single acting spring return pneumatic actuator
- Rack and pinion quarter turn design
- End of stroke adjustment
- Air supply connection to NAMUR standard for solenoid valves and speed controllers
- ISO 5211 bottom mount for direct installation onto valves, declutchable gearboxes or mounting kits
- Position indicator with NAMUR interface for limit switch boxes and positioners
- Two independent externally mounted travel stops, ±5° adjustment at open or closed
- Operating direction is reversible · 5 to 12 spring configurations (up to 16 on APRT8000SR)
- Fasteners: 316 stainless steel

TECHNICAL SPECIFICATION

Body	**Extruded aluminium alloy**
End caps	**Cast aluminium, epoxy coated**
Cylinder size	**52 mm – 400 mm**
Control pressure	**2.5 – 8 bar**
Control medium	**Dry or lubricated air, non-corrosive gases** **Max particle diameter 30 µm**
Ambient temperature	**Standard −20 °C to +80 °C** **Low temp option −40 °C to +80 °C** **High temp option −20 °C to +150 °C**
Coatings	**Hard anodise, epoxy, PTFE or nickel plated**
Mounting pad	**ISO 5211**
Application	**Indoor or outdoor use**

OPTIONS

LIMIT SWITCHES

Mechanical switches · proximity sensors · explosion proof

NAMUR SOLENOIDS

12 V DC, 24 V DC · 24 V AC, 110 V AC, 240 V AC

ACCESSORIES

Viton seals for −20 °C to 150 °C · filter regulators · positioners · extensions · repair seal kits

DIMENSIONAL SPECIFICATIONS

MENSIONS SPECIFICATIONS

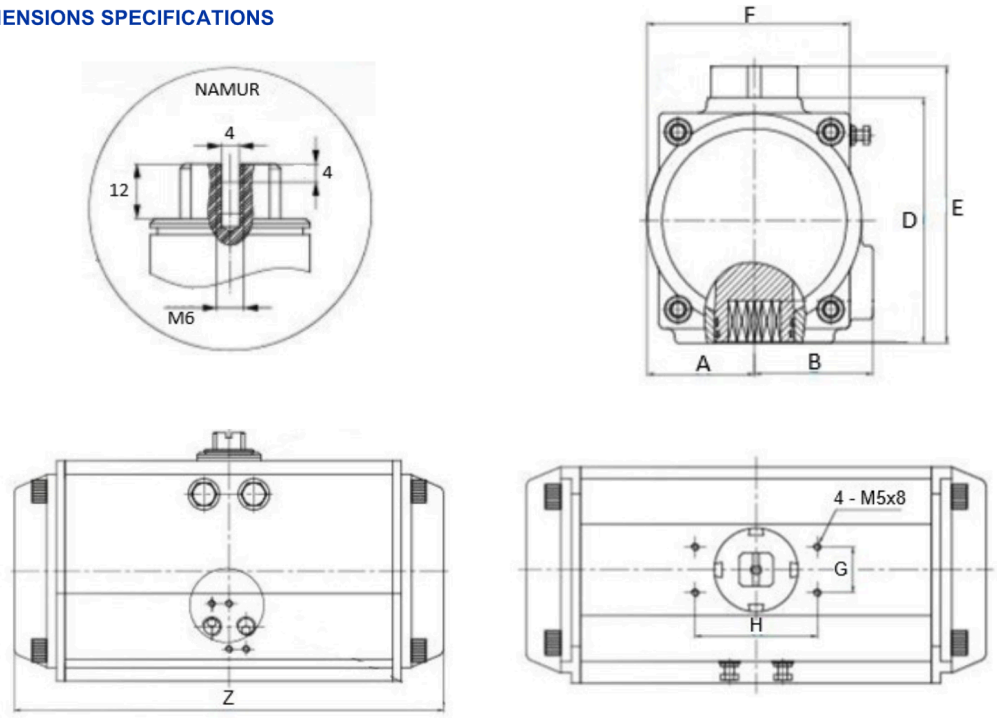


Fig. 1 — NAMUR accessory pad, end view (A, B, D, E, F), plan views (G, H, Z) and mounting threads.

Model	Cylinder Ø	A	B	D	E	F	G	H	Z	Weight (kg)
APRT020SR	52	30	41.5	72	92	65	30	80	149	1.48
APRT035SR	63	36	47	88	108	72	30	80	168	2.12
APRT050SR	75	42	53	99.5	119.5	81	30	80	184	2.83
APRT075SR	83	46	57	109	129	92	30	80	210	3.69
APRT110SR	92	50	58.5	116.5	136.5	98	30	80	262	5.35
APRT160SR	105	57.5	64	133	153	109.5	30	80	268	6.72
APRT255SR	125	67.5	74.5	155	175	127.5	30	80	301	10.32
APRT435SR	140	75	77	172	192	137.5	30	80	394	15.84
APRT665SR	160	87	87	197	217	158	30	80	458	23.73
APRT1000SR	190	103	103	230	260	189	30	130	528	41.93
APRT1200SR	210	113	113	255	285	210	30	130	536	55.94
APRT1800SR	240	130	130	289	319	245	30	130	606	67.03
APRT2700SR	270	147	147	328	358	273	30	130	726	98.29
APRT3800SR	300	203	203	348	378	290	30	130	760	133.94
APRT5700SR	350	230	230	408	438	336	30	130	888	209.1
APRT8000SR	400	258	258	480	510	360	30	130	930	225.46

All dimensions in millimetres unless stated.

MOUNTING & SHAFT INTERFACE

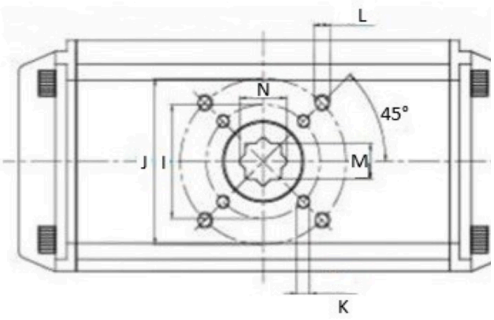


Fig. 2 — Bottom mount flange (I, J, K, L, M, N).

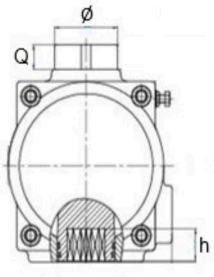


Fig. 3 — Drive interface.

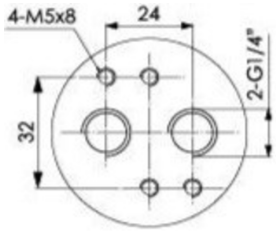


Fig. 4 — NAMUR G1/4″, 4 – M5×8.

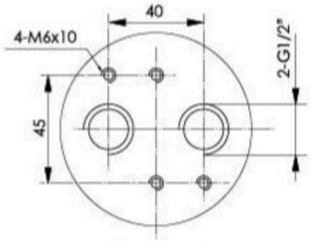


Fig. 5 — NAMUR G1/2″, 4 – M6×10.

ISO 5211 FLANGE SPECIFICATIONS

Flange	OD	PCD	Bolt qty	Bolt size	Thread depth
F03	46	36	4	M5	8
F04	54	42	4	M5	8
F05	65	50	4	M6	10
F07	90	70	4	M8	13
F10	125	102	4	M10	16
F12	150	125	4	M12	20
F14	175	140	4	M16	25
F16	210	165	4	M20	25
F25	300	254	8	M16	25

MOUNTING FLANGE, SHAFT AND AIR SUPPLY BY MODEL

	ISO 5211 flange							
Model	I	J	M	N	Ø Q	h	Ø	Air supply
APRT020SR	F03	F05	11	15.5	20	14	40	NAMUR 1/4″
APRT035SR	F05	F07	14	19.7	20	18	40	NAMUR 1/4″
APRT050SR	F05	F07	14	19.7	20	18	40	NAMUR 1/4″
APRT075SR	F05	F07	17	24	20	21	40	NAMUR 1/4″
APRT110SR	F05	F07	17	24	20	31	40	NAMUR 1/4″
APRT160SR	F07	F10	22	31	20	26	40	NAMUR 1/4″
APRT255SR	F07	F10	22	29.5	20	37	55	NAMUR 1/4″
APRT435SR	F10	F12	27	36.7	20	37	55	NAMUR 1/4″
APRT665SR	F10	F12	27	36.7	20	37	55	NAMUR 1/4″
APRT1000SR	—	F14	36	49.5	30	47	80	NAMUR 1/4″
APRT1200SR	—	F14	36	49.5	30	47	80	NAMUR 1/4″
APRT1800SR	—	F16	46	63.6	30	53	80	NAMUR 1/4″
APRT2700SR	—	F16	46	63.6	30	66	80	NAMUR 1/4″
APRT3800SR	F16	Ø215	Ø50.6	59.2	30	72	80	NAMUR 1/2″
APRT5700SR	F16	F25	* 55	63.6	30	72	80	NAMUR 1/2″
APRT8000SR	F16	F25	* 55	77.7	30	72	80	NAMUR 1/2″

* denotes output shaft can be custom configured.

TORQUE OUTPUT & AIR CONSUMPTION — APRT020SR TO APRT435SR

Model	Springs	2.5 bar		3 bar		4 bar		5 bar		6 bar		7 bar		8 bar		Spring output		Air vol. (L)
		0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	90° st.	0° end	
	5	5.7	3.8	7.6	5.7											6.2	4.3	
	6	4.9	2.5	6.9	4.5	10.9	8.5									7.4	5.0	
APRT020SR	7	4.0	1.3	6.0	3.3	9.8	7.3	14.0	10.4							8.6	5.9	0.12
	8			5.2	2.0	9.2	6.0	13.2	9.1	17.2	14.1					9.9	6.7	
	9			4.3	0.8	8.3	4.8	12.3	7.9	16.3	12.8	20.3	16.8			11.1	7.6	

Output torque in Nm. "0° st." is air-stroke start torque at closed position; "90° end" is air-stroke end torque at open position. Spring output is the spring return torque at 90° start and 0° end.

TORQUE OUTPUT & AIR CONSUMPTION — APRT020SR TO APRT435SR

Model	Springs	2.5 bar		3 bar		4 bar		5 bar		6 bar		7 bar		8 bar		Spring output		Air vol. (L)
		0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	90° st.	0° end	
10					7.4	3.6	11.5	6.7	15.5	11.6	19.5	15.6			12.4	8.5		
11					6.6	2.3	10.6	5.4	14.6	10.4	18.6	14.3	22.6	18.3	13.6	9.3		
12							9.7	4.2	13.8	9.1	17.8	12.2	21.8	17.1	14.8	10.2		
	5	11.4	7.7	15.0	11.4	22.3	18.7									10.4	6.8	
	6	10.1	5.7	13.6	9.3	20.9	16.6	28.3	23.9							12.5	8.2	
	7	8.6	3.6	12.5	7.2	19.5	14.5	26.8	21.9							14.6	9.6	
APRT035SR	8			10.9	5.1	18.2	12.4	25.5	19.8	32.8	27.0	40.1	34.3			16.7	10.9	0.21
	9					16.8	10.4	24.1	17.7	31.4	24.9	38.7	32.2			18.8	12.3	
	10					14	8.2	22.8	15.6	30.0	22.8	37.3	30.1	44.7	37.4	20.9	13.7	
	11							21.5	13.5	38.7	20.7	36.0	28.0	43.3	35.3	22.9	15.0	
	12							20.0	11.4	27.3	18.6	34.6	25.9	41.9	33.3	25.0	16.4	
	5	14.5	10.6	19.4	15.5	29.5	25.7									14.5	10.5	
	6	12.4	7.6	17.3	12.6	27.4	22.7	37.5	32.8							17.4	12.7	
	7	10.4	4.8	15.2	9.7	25.3	19.9	35.4	29.9							20.3	14.8	
APRT050SR	8			13.1	6.8	23.1	16.9	33.3	27.0	43.2	37.0	53.3	47.0			23.2	16.9	0.3
	9					21.0	14.1	31.2	24.1	41.1	34.1	51.2	44.2			26.1	19.0	
	10					19.0	11.1	28.8	21.2	39.0	31.2	49.1	41.2	59.1	51.2	29.0	21.1	
	11							27.0	18.3	37.0	28.3	47.0	38.4	57.0	48.4	31.9	23.2	
	12							24.9	15.4	34.9	25.4	44.9	35.4	54.9	45.4	34.7	25.3	
	5	23.3	16.1	31.1	24.0	46.8	39.7									23.0	15.8	
	6	20.1	11.5	28.0	19.3	43.7	35.1	59.4	50.7							27.6	19.0	
	7	17.0	6.9	24.8	14.8	40.5	30.5	56.2	46.2							32.2	22.1	
APRT075SR	8			21.7	10.1	37.4	25.8	53.1	41.5	68.8	57.2	84.5	72.9			36.8	25.3	0.43
	9					34.2	21.3	49.9	37.0	65.6	52.6	81.2	68.3			41.4	28.5	
	10					31.0	16.6	46.7	32.3	62.4	48.0	78.1	63.7	93.8	79.3	46.0	31.6	
	11							43.6	27.7	59.3	43.4	75.0	59.1	90.6	74.8	50.6	34.8	
	12							40.4	23.2	56.1	38.9	71.7	54.5	87.4	70.2	55.2	38.0	
	5	33.1	22.0	44.2	33.2	66.8	55.9									34.4	23.3	
	6	28.4	15.2	39.6	26.4	62.2	49.0	84.8	71.6							41.2	28.0	
	7	23.8	8.2	34.9	19.4	57.5	42.1	80.2	64.7							48.1	32.7	
APRT110SR	8			31.3	12.6	52.9	35.2	75.5	57.9	98.1	80.5	120.7	103.0			55.0	37.3	0.64
	9					48.2	28.4	70.9	51.0	93.5	73.6	116.0	96.1			61.9	42.00	
	10					43.6	21.5	66.2	44.1	88.8	66.7	111.3	89.2	134.0	110.8	68.75	46.7	
	11							61.5	37.2	84.1	59.9	106.6	82.4	129.2	105.0	75.6	51.4	
	12							56.8	30.4	79.4	53.0	101.9	75.5	124.5	98.1	82.5	56.0	
	5	51.0	33.4	67.5	49.9	100.6	83.0									49.2	31.6	
	6	44.7	23.5	61.1	40.0	94.2	73.2	127.3	106.2							59.1	38.0	
	7	38.4	13.7	54.9	30.3	87.9	63.4	121.0	96.4							68.9	44.3	
APRT160SR	8			48.5	20.4	81.6	53.5	114.7	86.5	147.7	119.6	180.8	152.7			78.7	50.6	0.95
	9					75.3	43.7	108.4	76.8	141.5	109.8	174.5	142.9			88.6	56.9	
	10					68.9	33.4	102.0	66.5	135.1	99.6	168.2	132.6	201.2	165.7	98.4	63.3	
	11							95.7	57.0	128.7	90.1	161.8	123.1	194.8	156.2	108.3	69.6	
	12							89.4	47.5	122.5	80.6	155.5	113.6	188.6	146.7	118.1	75.9	
APRT255SR	5	73	47	98	72	148	122									79	52	1.6
	6	63	31	88	56	138	107	188	157							94	63	

Output torque in Nm. "0° st." is air-stroke start torque at closed position; "90° end" is air-stroke end torque at open position. Spring output is the spring return torque at 90° start and 0° end.

TORQUE OUTPUT & AIR CONSUMPTION — APRT020SR TO APRT435SR

		2.5 bar		3 bar		4 bar		5 bar		6 bar		7 bar		8 bar		Spring output		
Model	Springs	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	90° st.	0° end	Air vol. (L)
	7	52	15	77	40	127	90	178	141							110	73	
	8			67	25	117	75	167	125	217	176	268	226			125	84	
	9					107	59	157	109	207	159	257	210			141	94	
	10					96	44	146	94	196	144	247	194	297	245	157	105	
	11							136	78	186	128	236	178	286	228	173	115	
	12							125	63	176	113	226	163	276	213	188	125	
APRT435SR	5	128	85	171	127	256	213										129	86	2.5
	6	111	59	154	102	239	187	325	273								155	103	
	7	94	33	137	76	222	162	308	247								181	120	
	8			120	50	205	136	291	221	376	307	462	392				206	137	
	9					187	110	273	196	358	281	444	367				232	155	
	10					170	84	256	169	341	255	427	340	512	426		258	172	
	11							238	143	324	229	409	314	495	400		284	189	
	12							221	118	307	203	392	289	478	374		310	206	

Output torque in Nm. “0° st.” is air-stroke start torque at closed position; “90° end” is air-stroke end torque at open position. Spring output is the spring return torque at 90° start and 0° end.

TORQUE OUTPUT & AIR CONSUMPTION — APRT665SRK TO APRT8000SRK

Model	Springs	2.5 bar		3 bar		4 bar		5 bar		6 bar		7 bar		8 bar		Spring output		Air vol. (L)
		0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	90° st.	0° end	
APRT665SRK	5	193	124	259	191	392	324									208	140	3.7
	6	165	83	232	149	365	282	498	415							250	168	
	7	137	41	203	107	336	240	469	373							292	196	
	8			176	66	309	199	442	237	575	465	708	598			333	223	
	9					280	157	413	290	546	423	679	556			375	251	
	10					253	115	386	248	519	381	652	514	785	647	417	279	
	11							358	207	491	340	624	473	757	606	458	307	
	12							330	165	463	298	596	431	729	564	500	335	
APRT1000SRK	5	332	222	438	329	651	542									309	200	5.9
	6	292	161	398	267	611	480	824	693							371	240	
	7	252	99	358	205	571	418	784	631							433	280	
	8			318	143	531	356	744	569	957	782	1169	995			495	320	
	9					491	295	704	507	917	720	1130	933			557	360	
	10					451	233	664	446	877	658	1090	871	1302	1084	618	400	
	11							624	384	837	597	1050	809	1263	1022	680	440	
	12							584	322	797	535	1010	748	1223	960	742	480	
APRT1200SRK	5	390	285	523	418	789	684									380	275	7.5
	6	335	209	468	342	734	608	1000	874							456	330	
	7	280	133	413	266	679	532	945	798							532	385	
	8			358	190	624	456	890	722	1156	988	1422	1254			608	440	
	9					569	380	835	646	1101	912	1367	1178			684	495	
	10					514	304	780	570	1046	836	1312	1102	1578	1368	760	550	
	11							725	494	991	760	1257	1026	1523	1292	836	605	
	12							670	418	936	684	1202	950	1468	1216	912	660	
APRT1800SRK	5	552	409	744	600	1129	985									554	410	11
	6	470	297	662	489	1047	874	1432	1259							665	492	
	7	388	187	580	379	964	764	1349	1149							775	575	
	8			498	268	883	653	1267	1037	1652	1422	2037	1807			886	656	
	9					800	542	1185	926	1569	1311	1954	1696			998	739	
	10					718	431	1103	816	1488	1201	1872	1586	2257	1970	1108	821	
	11							1021	705	1406	1090	1791	1474	2176	1859	1219	903	
	12							939	594	1323	979	1708	1363	2093	1748	1330	985	
APRT2700SRK	5	903	675	1195	968	1779	1552									787	560	17
	6	790	519	1083	811	1667	1396	2252	1981							943	672	
	7	679	361	972	654	1556	1238	2141	1823							1101	783	
	8			860	497	1444	1081	2029	1666	2614	2252	3199	2836			1258	895	
	9					1332	923	1917	1509	2502	2094	3087	2678			1416	1007	
	10					1220	767	1805	1352	2390	1937	2974	2521	3560	3107	1572	1119	
	11							1693	1194	2278	1779	2862	2364	3448	2949	1730	1231	
	12							1582	1037	2167	1623	2751	2207	3336	2792	1887	1342	
APRT3800SRK	5	1097	729													1061	730	23.8
	6	935	494	1316	875											1273	876	
	7	772	258	1153	639	1916	1402									1485	1022	

Air volume and action cycle times **L/min** = Air volume (air consumption opening) × $\left[\frac{\text{Air supply (kPa)} + 101.3}{101.3}\right]$ × Actuator cycle times (per minute)

· Blank cells fall outside the recommended operating envelope.

TORQUE OUTPUT & AIR CONSUMPTION — APRT665SRK TO APRT8000SRK

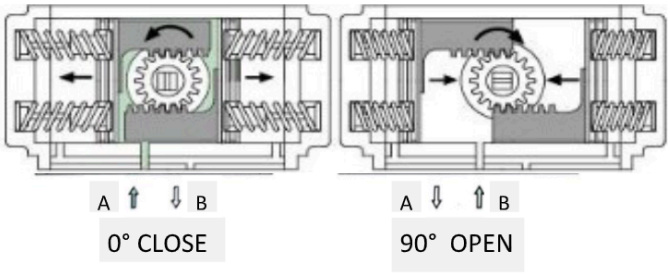
		2.5 bar		3 bar		4 bar		5 bar		6 bar		7 bar		8 bar		Spring output		
Model	Springs	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	0° st.	90° end	90° st.	0° end	Air vol. (L)
8			991	403	1754	1166	2517	1929							1697	1168		
9					1592	930	2355	1693	3118	2456					1909	1314		
10					1430	695	2193	1458	2956	221	3719	2984	4482	3747	2122	1460		
11							2030	1222	2793	1985	3556	2748	4319	3511	2334	1606		
12							1868	986	2631	1749	3394	2512	4157	3275	2546	1752		
APRT5700SRK	5	1553	964													1702	1173	35.1
	6	1292	586	1863	1157											2043	1408	
	7	1031	208	1602	779	2745	1922									2383	1642	
	8			1341	401	2484	1544	3626	2686							2724	1877	
	9					2224	1165	3336	2307	4508	3449					3064	2112	
	10					1963	787	3105	1929	4247	3071	5390	4214	6532	5356	3405	2346	
	11							2844	1551	3986	2693	5129	3836	6271	4978	3745	2581	
	12							2584	1172	3726	2314	4869	3457	6011	4599	4086	2816	
APRT8000SRK	7	2028	869													2880	1837	52.6
	8	1736	411	2550	1225											3292	2100	
	9			2259	768	3887	2396									3703	2362	
	10			1967	311	3595	1939	5223	3567							4115	2624	
	11					3303	1482	4931	3110	6559	4738					4526	2887	
	12					3012	1025	4640	2653	6268	4281	7895	5908	9523	7536	4938	3149	
	13							4348	2195	5976	3823	7603	5450	9231	7078	5349	3412	
	14							4057	1738	5685	3366	7312	4993	8940	6621	5761	3674	
	15							3765	1281	5393	2909	7020	4536	8648	6164	6172	3937	
	16									5101	2452	6728	4079	8356	5707	6584	4199	

Air volume and action cycle times **L/min** = Air volume (air consumption opening) × $\left[\frac{\text{Air supply (kPa)} + 101.3}{101.3}\right]$ × Actuator cycle times (per minute)

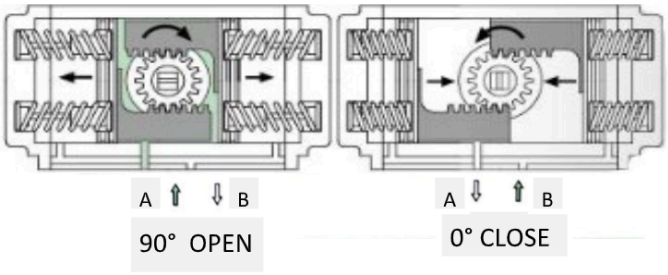
· Blank cells fall outside the recommended operating envelope.

OPERATING PRINCIPLES

COUNTER CLOCKWISE



CLOCKWISE



COUNTER CLOCKWISE — AIR STROKE

Air to port A forces the pistons outwards, turning the drive shaft counter clockwise while air is exhausted from port B. The springs compress and store the return energy.

COUNTER CLOCKWISE — SPRING RETURN

On loss of air pressure at port A the stored spring energy drives the pistons inwards; the drive shaft turns clockwise while air exhausts from port A.

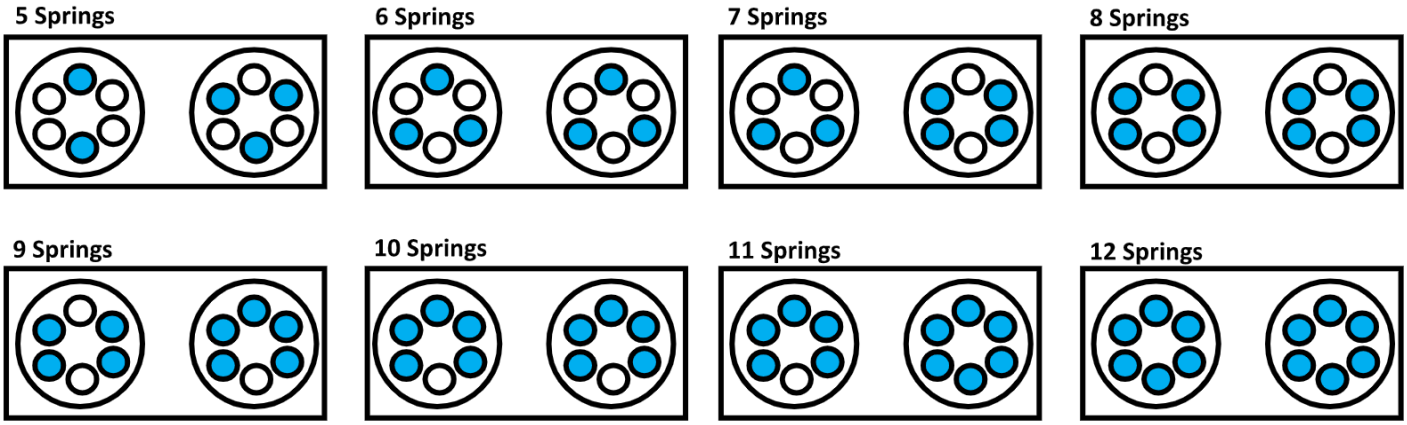
CLOCKWISE — AIR STROKE

Reversed assembly: air to port A forces the pistons outwards and compresses the springs, turning the drive shaft clockwise while air exhausts from port B.

CLOCKWISE — SPRING RETURN

On loss of air pressure at port A the springs drive the pistons inwards; the drive shaft turns counter clockwise while air exhausts from port A.

SPRING CONFIGURATIONS



Spring sets are supplied in 5, 6, 7, 8, 9, 10, 11 and 12 spring configurations (APRT8000SRK also 13 to 16). Selecting a higher spring count raises the guaranteed fail-safe torque and lifts the minimum air supply pressure required to complete the air stroke — refer to the torque tables for the valid pressure range of each configuration.

STANDARDS & COMPLIANCE

- Air supply interface to NAMUR standard
- Accessory interface to NAMUR (VDI/VDE 3845)
- Bottom mounting flange according to ISO 5211
- Fasteners in 316 stainless steel

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

ACTUATION · DRIVE ADAPTORS

ADASQ Drive Adaptor — Square to Square

Square to square drive adaptor for interfacing quarter-turn actuators to valve stems. Carbon steel body, 11 mm to 36 mm across flats.

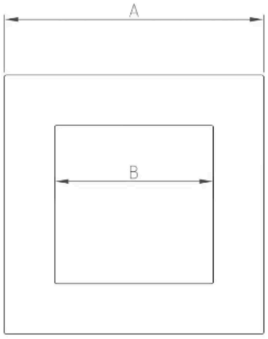


CARBON STEEL | 11 – 36 MM | CE · ISO 9001

SPECIFICATION

Size range	**11 mm to 36 mm**
Body	**Carbon steel**
Function	**Square to square**
Factory accreditation	**CE, ISO 9001**
Application	**Interfacing actuators to valves**

DIMENSIONS



A across flats of the outer square, B across flats of the drive bore.

MODEL CODES & DIMENSIONS

Code	A (mm)	B (mm)
ADASQ11-9	11	9
ADASQ14-9	14	9
ADASQ14-11	14	11
ADASQ17-9	17	9
ADASQ17-11	17	11
ADASQ17-14	17	14
ADASQ22-14	22	14
ADASQ22-17	22	17
ADASQ22-19	22	19
ADASQ27-17	27	17
ADASQ27-22	27	22
ADASQ35-27	35	27
ADASQ36-22	36	22
ADASQ36-27	36	27

All dimensions in millimetres. Adaptor length is made to suit the application — advise stem engagement when ordering.

ACTUATION · DRIVE ADAPTORS

ADASR Drive Adaptor — Key Way to Star

Star drive to key way drive adaptor for interfacing quarter-turn actuators to valve stems. Carbon steel body, 17 mm to 46 mm across flats.

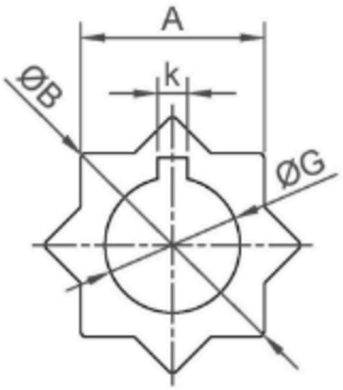


CARBON STEEL | 17 – 46 MM | CE · ISO 9001 · TÜV

SPECIFICATION

Size range	17 mm to 46 mm
Body	Carbon steel
Function	Star drive to key way
Factory accreditation	CE, ISO 9001, TÜV
Application	Interfacing actuators to valves

DIMENSIONS



A across flats, ØB over star points, ØG bore and k key way width.

MODEL CODES & DIMENSIONS

Code	A (mm)	Ø G (mm)	k (mm)	B (mm)	Length (mm)
ADASR17-12.8	17	12.8	3	22.2	19
ADASR19-12.8	19	12.8	3	25.2	21
ADASR22-15.9	22	15.9	5	28.2	24
ADASR22-19.05	22	19.05	5	28.2	24
ADASR27-19.05	27	19.05	5	36.2	29
ADASR27-22.2	27	22.2	5	36.2	29
ADASR36-28.7	36	28.7	8	48.2	38
ADASR36-31.8	36	31.8	8	48.2	38
ADASR46-31.8	46	31.8	8	60.2	48
ADASR46-33.3	46	33.3	10	60.2	48
ADASR46-38.1	46	38.1	10	60.2	48
ADASR46-41.4	46	41.4	10	60.2	48
ADASR46-41.4-12	46	41.4	12	60.2	48

All dimensions in millimetres. Non-standard bore and key way combinations available on request.

Valve Accessories

VALVE ACCESSORIES · EXTENSION SPINDLES

BVES Butterfly Valve Extensions

Ductile iron extension spindles that raise valve operation to grade or platform level for buried, pit-mounted and elevated butterfly valve installations. Suits DN50–DN600 valves in 1 m, 1.5 m and 2 m lengths.



ISO 5211 | FBE COATED | DN50 – DN600

FEATURES

- Ductile iron construction with fusion bonded epoxy coating
- ISO 5211 mounting pads top and bottom
- Suits lever, gearbox and actuator operation at the upper flange
- Standard lengths 1 m, 1.5 m and 2 m; custom lengths on request
- Matched drive shaft sizing for each valve DN
- Suits buried, pit and elevated installations

SPECIFICATIONS

Construction	**Ductile iron body**
Suits valves	**50 mm – 600 mm**
Coatings	**Fusion bonded epoxy**
Mounting pad	**ISO 5211**
Lengths	**0.5 m to 2 m**

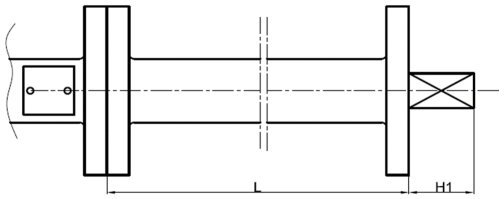


Fig. 1 — BVES extension spindle.

DIMENSIONS

Model	Valve DN (mm)	L (m)	H3	ISO 5211 top flange	Shaft size (H×H or Øc)
BVES050-*M	50	1 / 1.5 / 2	29	F05	9
BVES065-*M	65	1 / 1.5 / 2	29	F05	9
BVES080-*M	80	1 / 1.5 / 2	29	F05	9
BVES100-*M	100	1 / 1.5 / 2	29	F07	11
BVES125-*M	125	1 / 1.5 / 2	29	F07	14
BVES150-*M	150	1 / 1.5 / 2	29	F07	14
BVES200-*M	200	1 / 1.5 / 2	35	F10	17
BVES250-*M	250	1 / 1.5 / 2	35	F10	22
BVES300-*M	300	1 / 1.5 / 2	35	F10	22
BVES350-*M	350	1 / 1.5 / 2	45	F10	31.6
BVES400-*M	400	1 / 1.5 / 2	51.2	F14	33.15
BVES450-*M	450	1 / 1.5 / 2	51.2	F14	38
BVES500-*M	500	1 / 1.5 / 2	64.2	F14	41.15
BVES600-*M	600	1 / 1.5 / 2	70.2	F16	50.65

VALVE ACCESSORIES · GEAR OPERATORS

BVG Butterfly Valve Gear Boxes

Enclosed worm gear operators with handwheel for manual butterfly valve operation, available standard or lockable. ISO 5211 mounted, DN50–DN1200, 150 Nm to 25 000 Nm output torque.

ISO 5211 | STANDARD OR LOCKABLE | DN50 – DN1200



FEATURES

- Enclosed, grease filled worm gear drive
- Self locking in any position with mechanical travel stops
- Position indicator on the gear housing
- Standard or lockable handwheel versions
- ISO 5211 mounting for direct fit to GWG butterfly valves
- Fitted as standard on all valve sizes 350 mm and above

GEARBOX SPECIFICATIONS

Fig. 1 — Gear operator, 50–450 mm.

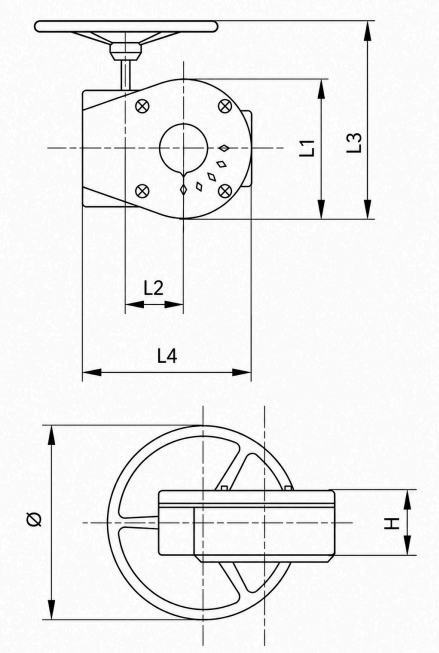
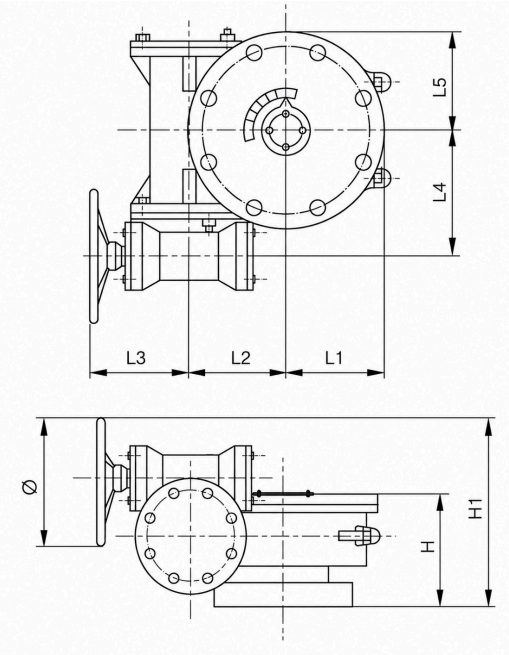


Fig. 2 — Gear operator, 500–1200 mm.



50 – 450 MM BUTTERFLY VALVE

Code	DN	L1	L2	L3	L4	L5	Ø	ISO 5211 Top Flange	Mounting Bolts	Output Torque (Nm)	Drive Ratio	Turns
BVGS50/65/80	50	105	45	215	127	70	150	F05	4 – M6	150	24:1	6
BVGS50/65/80	65	105	45	215	127	70	150	F05	4 – M6	150	24:1	6
BVGS50/65/80	80	105	45	215	127	70	150	F05	4 – M6	150	24:1	6
BVGS100	100	105	45	215	127	70	150	F07	4 – M8	150	24:1	6
BVGS125/150	125	105	45	215	127	70	150	F07	4 – M8	150	24:1	6
BVGS125/150	150	105	45	215	127	70	150	F07	4 – M8	150	24:1	6
BVGS200	200	145	63	303	170	76	300	F10	4 – M10	500	30:1	7.5
BVGS250	250	145	63	303	170	76	300	F10	4 – M10	500	30:1	7.5
BVGS300	300	156	80	300	190	79	300	F10	4 – M10	1200	50:1	12.5
BVGR350	350	156	80	300	190	79	300	F10	4 – M10	1200	50:1	12.5
BVGR400	400	247	118	336	279	109	385	F14	4 – M16	1800	80:1	20
BVGR450	450	247	118	336	279	109	385	F14	4 – M16	1800	80:1	20

500 – 1200 MM BUTTERFLY VALVE

Code	DN	L1	L2	L3	L4	L5	H	H1	Ø	ISO 5211 Top Flange	Mounting Bolts	Output Torque (Nm)	Drive Ratio	Turns
BVGR500	500	107	100	160	168	107	125	271	285	F14	4 – M16	2500	640:1	160
BVGR600	600	131	125	160	193	131	136	330	385	F16	4 – M20	4000	640:1	160
BVGR700/750/800	700	146	140	197	230	146	149	378	425	F25	8 – M16	8000	704:1	176
BVGR700/750/800	750	146	140	197	230	146	149	378	425	F25	8 – M16	8000	704:1	176
BVGR700/750/800	800	146	140	197	230	146	149	378	425	F25	8 – M16	8000	704:1	176
BVGR900/1000	900	173	162	197	246	173	155	377	425	F25	8 – M16	15000	748:1	187
BVGR900/1000	1000	173	162	197	246	173	155	377	425	F25	8 – M16	15000	748:1	187
BVGR1200	1200	185	240	203	303	251	194	399	425	F30	8 – M20	25000	850:1	212.5

All dimensions in millimetres. Gearboxes 350 mm and above are fitted as standard.

Designs, materials and specifications shown are subject to change without notice due to our continuing program of product development. Confirm critical dimensions with Global Water Group prior to fabrication.

Together, we move water

GLOBAL WATER GROUP (GWG)
MACKAY

Mackay, QLD 4740
AUSTRALIA
+61 447 171 983
sales@gwgpoly.com.au

GLOBAL WATER GROUP (GWG)
TOWNSVILLE

Townsville, QLD 4812
AUSTRALIA
+61 491 852 202
sales@gwgpoly.com.au

GLOBAL WATER GROUP (GWG)
BRISBANE - HEAD OFFICE

36 Hub Crescent,
Heathwood, QLD 4110
AUSTRALIA
+61 7 3517 5595
bnesales@gwgpoly.com.au